

Price Agreement Award

C249051 Chemtrade Chemicals US LLC

APPROVED by the Trustees and signed by the Chairman of the Oklahoma City Water Utilities Trust this 26TH day of MARCH, 2024.

ATTEST:

OKLAHOMA CITY WATER UTILITIES TRUST

Thiti Graham
ASST. SECRETARY



Joe Couch
CHAIRMAN

CONCURRED by the Council and signed by the Mayor of The City of Oklahoma City this 9TH day of APRIL, 2024.

ATTEST:

THE CITY OF OKLAHOMA CITY

Amy K. Simpson
CITY CLERK



David Holt
MAYOR

REVIEWED for form and legality.

Patricia Mann
Assistant Municipal Counselor

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Supplier: **CHEMTRADE CHEMICALS US LLC**

**BID/PRICING AGREEMENT/CONTRACT FORM & NON-DISCRIMINATION
STATEMENT**
**BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS
DOCUMENT PRIOR TO SUBMITTING IN THE ELECTRONIC BID SYSTEM**

**Please be aware that typing in your password acts as your electronic signature, which is
just as legal and binding as an original signature.**

(See Electronic Signatures in Global and National Commerce Act for more information.)

**THIS DOCUMENT MUST BE ELECTRONICALLY SIGNED AND SUBMITTED WITH THE BID
OR THE BID WILL BE REJECTED**

INSTRUCTIONS: This document MUST be electronically signed and submitted with the bid for the bid to be valid. Failure to electronically sign the this document prior to submitting the electronic bid will result in rejection of your bid. This document constitutes your bid and will be the Pricing Agreement/Contract document under which you are to perform, should your bid be accepted, so it must be properly and completely executed. It is, therefore, essential that you are aware of its terms, as well as those contained in the specifications.

Submit this electronically signed document, along with all accompanying documents:

THIS PRICING AGREEMENT/CONTRACT is made and entered into, by and between **CHEMTRADE CHEMICALS US LL**Chereinafter referred to as "Bidder" and The City of Oklahoma City, a municipal corporation, or a participating Public Trust of which The City of Oklahoma City is Beneficiary hereinafter referred to as the "Contracting Entity."

WITNESSETH:

WHEREAS, the governing body of the Contracting Entity has approved certain specifications and requested by notice that bids be submitted thereon; and

WHEREAS, this document until executed by the Mayor/Chairman of the Contracting Entity constitutes the Bidder's proposal; and

NOW, THEREFORE, that in consideration of the covenants, agreements and representations as hereinafter set forth, it is mutually agreed by the parties that:

1. The Bidder agrees to sell and deliver to the Contracting Entity, the items of material and/or services, specified in the pricing section of the electronic bid submittal, which is attached hereto and made a part of this Pricing Agreement/Contract. List the prompt payment discount, if any, for this agreement in the space provided below:

Discount for Prompt Payment **0% 30 Days**

2. The Bidder expressly warrants that all articles, material, and/or work covered in this Pricing Agreement/Contract will conform to the specifications and electronic bid documents attached to this bid and are hereby incorporated, as if set forth in full herein; and further warrants that the same shall be of good material and workmanship, and free from defects.

3. The Bidder understands that all bids are to be submitted in U.S. dollars at a firm price. Bids submitted in any currency other than U.S. dollars will be rejected.

4. The Bidder also understands that all invoices shall be submitted in U.S. dollars and agrees to accept payment in U.S. dollars as full satisfaction of the invoiced amount.

5. If any of the goods fail to meet the warranties contained in Paragraph 2, above, the Bidder, upon notice from the Contracting Entity, shall promptly correct or replace the same at the Bidder's expense. If the Bidder shall fail to so do, the Contracting Entity may cancel this order as to all such goods, and in addition, may cancel the then remaining balance of this order. After notice to the Bidder, all such goods will be held

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at the Bidder's risk. The Contracting Entity may, at the Bidder's direction, make available such goods to be returned to the Bidder at the Bidder's risk, and all transportation charges, both to and from the original destination, shall be paid by the Bidder. Any payment for such goods shall be refunded by the Bidder unless the Bidder promptly corrects or replaces the same at the Bidder's expense.

6. The Contracting Entity agrees to pay to the Bidder the price and amount in accordance with Paragraph 1 above, based on the quantity actually purchased, upon delivery to and acceptance by the Contracting Entity, of the material and/or service[s] above described and upon the filing by the Bidder, and approval by the Contracting Entity, of a verified claim for the amount due.

7. The Bidder agrees, in connection with the performance of work under this Pricing Agreement/Contract:

a. That the Bidder will not discriminate against any employee or applicant for employment, because of race, creed, color, sex, age, national origin, ancestry or disability. The Bidder shall take affirmative action to ensure that employees are treated without regard to their race, creed, color, age, national origin, sex, ancestry or disability. Such actions shall include, but not be limited to, the following: employment, promotion, demotion or transfer, recruitment, advertising, lay-off, termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Bidder agrees to post, in a conspicuous place available to employees and applicants for employment, notices to be provided by the City Clerk/Secretary of the Contracting Entity setting forth the provisions of this section, and;

b. That the Bidder agrees to include this non-discrimination clause in any subcontracts connected with the performance of this Pricing Agreement/Contract.

8. In the event of the Bidder's non-compliance with the above non-discrimination clause, this Pricing Agreement/Contract may be canceled or terminated by the Contracting Entity. The Bidder may be declared by the Contracting Entity ineligible for further Pricing Agreement[s]/Contract[s] with the Contracting Entity until satisfactory proof of intent to comply is made by the Bidder.

9. The risk of loss or damage shall be borne by the Bidder at all times until the acceptance of goods, properly packed, by the Contracting Entity.

10. This Pricing Agreement/Contract, specifications, electronic bid submittal documents and any attachments constitutes the entire understanding and agreement of the parties upon the subject matter hereof. There is no agreement, oral or otherwise, which is not contained in or attached to this Pricing Agreement/Contract. This Pricing Agreement/Contract may not be modified or assigned unless approved in writing and signed by both parties.

11. The parties assume and understand that the variables in the Bidder's cost of performance may fluctuate; consequently, the parties agree that any fluctuations in the Bidder's costs will not alter the Bidder's obligations under this Pricing Agreement/Contract nor excuse performance or delay on the Bidder's part.

12. This Pricing Agreement/Contract shall be inoperative during such period of time that the aforesaid delivery or acceptance may be rendered impossible by reason of fire, Act of God or government regulation. Provided, however, to the extent that the Bidder has any commercially reasonable alternative method of performing this Pricing Agreement/Contract by purchase on the market or otherwise, the Bidder shall not be freed of any obligations hereunder by this clause, even though the goods intended for this Pricing Agreement/Contract were destroyed or their delivery delayed because of an event described above.

13. The shipping or receiving of any goods under this Pricing Agreement/Contract shall not be deemed, or be, a waiver of any right to damages for any prior failure to ship or receive any goods.

14. This Pricing Agreement/Contract shall be governed by the laws of the State of Oklahoma.

15. The Bidder shall be responsible for complying with all applicable federal, state and local laws.

16. If submitting a bid for services, the Bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) through the Department of Homeland Security and available at www.dhs.gov/E-Verify.

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The undersigned individual states that the Bidder will be bound by all components of its bid, the specification, the terms and conditions of the Pricing Agreement/Contract, and the requirements for Bidders.

WITNESS the hands of the parties hereto:

THIS FORM MUST BE ELECTRONICALLY SIGNED AND SUBMITTED WITH THE BID FOR THE BID TO BE VALID

Note: The owner or an officer of the business or corporation may sign this document. A Corporate Seal or a letter of authorization is needed for any other signer. For instance, if a Salesman or Manager signs this form, a letter of authorization or Corporate Seal is to be attached.

ELIZABETH RYNO

Type Name of Authorized Agent

MARKETING SPECIALIST

Title of Authorized Agent

CHEMTRADE CHEMICALS US LLC, 90 EAST HALSEY ROAD, PARSIPPANY, NJ

Company Name and Address

07054

Zip Code

800-441-2659 / 973-515-4461

Telephone Number and Fax Number if any

BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS DOCUMENT

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(See Electronic Signatures in Global and National Commerce Act for more information.)

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Supplier: **CHEMTRADE CHEMICALS US LLC**

NON-COLLUSION AFFIDAVIT

BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS DOCUMENT PRIOR TO SUBMITTING BID

Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature.

(See Electronic Signatures in Global and National Commerce Act for more information.)

The undersigned, of lawful age, being duly sworn, upon oath, deposes and says: That the undersigned has the lawful authority to execute the within and foregoing proposal/bid for, and on behalf of, the Proposer/Bidder; that the Proposer/Bidder has not, directly or indirectly, entered into any agreement, express or implied, with any Proposer/Bidder, having for its object the controlling of the price or amount of such proposal/bid, the limiting of the proposals/bids or the Proposers/Bidders, the parceling or farming out to any Proposer/Bidder or other persons, of any part of the Agreement or any part of the subject matter of the proposal/bid, or of the profits thereof, and that Proposer/Bidder has not and will not divulge the sealed proposal/bid to any person whomsoever, except those having a partnership or other financial interest with the Proposer/Bidder in the said proposal/bid, until after the said sealed proposals/bids are opened.

The undersigned further states that the Proposer/Bidder has not been a party to any collusion: among Proposer/Bidders in restraint of freedom of competition, by any agreement to bid at a fixed price or to refrain from proposing; or with any City/Trust official, City/Trust employee or City/Trust agent as to the quantity, quality, or price in the prospective Agreement, or any other terms of the said prospective Agreement; or in any discussions between the Proposers/Bidders or City/Trust official, City/Trust employee or City/Trust agent concerning the exchange of money or other thing of value for special consideration in the letting of Agreement. The Proposer/Bidder states that it has not paid, given or donated or agreed to pay, give or donate to any City/Trust official, officer or employee of the City or awarding agency, any money or other thing of value, either directly or indirectly, in the procuring of the award of Agreement pursuant to this Proposal/Bid.

Witness the hands of the parties hereto:

The undersigned states that the Proposer/Bidder will be bound by its proposal/bid, the specification, the terms and conditions of the Agreement, and the Requirements for Proposer/Bidders.

→ → THIS FORM TO BE COMPLETED BY THE PROPOSER/BIDDER PRIOR TO AGREEMENT APPROVAL ← ←

Elizabeth Ryno

Type Name of Authorized Agent/Representative

Chemtrade Chemicals US LLC

Company Name

90 EAST HALSEY ROAD, PARSIPPANY, NJ

Address

800-441-2659 / 973-515-4461

Telephone Number and Fax Number, if any

MARKETING SPECIALIST

Title

07054

Zip Code

TO BE COMPLETED BY THE NOTARY:

State of *

New Jersey

County of *

MORRIS

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[*State and County where notarized must be typed in for bid/proposal to be considered.][SAK1]

Signed and sworn to before me on this **31** day of **JANUARY**, **2024** by **ELIZABETH RYNO**
[Day] [Month] [Year] [Print the name of the agent/representative who signed above.]

My Commission Number: **50121606 (New Jersey)** **Parul Kachhia-Patel**
[Oklahoma] Type Name of Notary Public
My Commission Expires: **01/30/2025**
[Date/Year]

[49 Okla. Stat. 2011 §119]

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

LETTER OF AUTHORIZATION

THIS LETTER OF AUTHORIZATION MUST BE COMPLETED IF THE ATTACHED
LEGALLY BINDING DOCUMENT WAS NOT SIGNED BY THE STATUTORILY
AUTHORIZED OFFICER ON BEHALF OF THE CONTRACTING ENTITY.

City of Oklahoma City or related Public Trust:

This letter authorizes ELIZABETH RYNO to
(PRINTED NAME OF AUTHORIZED AGENT)
sign the attached legally binding document on behalf of CHEMTRADE CHEMICALS US LLC,
(CONTRACTING ENTITY)

Sincerely,



Signature of Authorized Agent

GROUP VICE-PRESIDENT

Printed Title

01-02-2024

Date

ALAN ROBINSON

Printed Name of Authorizing Office

Arobinson@chemtradelogistics.com

Email Address of Authorizing Officer

NOTE: If the Contracting Entity is a(n):

Corporation	The authorizing officer must be: President, Vice-President, Chairperson, or Vice-Chairperson
LLC	The authorizing officer must be: Manager, Managing Member, President, or Vice-President
Partnership	The authorizing officer must be: General Partner
Joint Venture	The authorizing officer must be: An Authorized Officer of Each of the Ventures

Supplier: CHEMTRADE CHEMICALS US LLC**BIDDER MUST ELECTRONICALLY COMPLETE THIS FORM PRIOR TO SUBMITTING BID****SUPPLIER CONTACT INFORMATION**

The purpose of this form is to assist various City Departments and Trusts with placing orders.

Sales Contact:

Company Name: Chemtrade Chemicals US LLC

Address: 90 East Halsey Road, Parsippany, NJ 07054

Contact Person: Robert Naranjo Email Address: RNaranjo@chemtradelogistics.com

Telephone Number: 360-440-0293 Fax Number:

Billing Contact:

Company Name: Chemtrade Chemicals US LLC

Address: 155 Gordan Baker Rd. Suite 300 Toronto, ON M2H 3N5

Contact Person: Mustafa Kamal, Credit Manager Email Address: mkamal@chemtradelogistics.com

Telephone Number: 647-259-3144 Fax Number: 416-496-1504

Service Contact:

Company Name: Chemtrade Chemicals US LLC

Address: 155 Gordon Baker Rd, Suite 300, Toronto, ON M3H 3N5

Contact Person: Jackie Prosser Email Address: cssorders@chemtradelogistics.com

Telephone Number: 844-204-9675 Fax Number: 647-255-3655

After Hours Emergency Number(s) 647-531-9709

After Hours Emergency Number(s) 360-440-0293

After Hours Emergency Number(s)

After Hours Emergency Number(s) bids@chemtradelogistics.com

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
05/01/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA, LLC. 9830 Colonnade Blvd, Suite 410 San Antonio, TX 78230 CN102200184-STND-GAWUL-23-24	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: INSURER(S) AFFORDING COVERAGE <table border="1"><tr><td>INSURER A : Berkley National Insurance Company</td><td>38911</td></tr><tr><td>INSURER B : Liberty Mutual Insurance Company</td><td>23043</td></tr><tr><td>INSURER C : Greenwich Insurance Company</td><td>22322</td></tr><tr><td>INSURER D : XL Insurance America, Inc.</td><td>24554</td></tr><tr><td>INSURER E :</td><td></td></tr><tr><td>INSURER F :</td><td></td></tr></table>	INSURER A : Berkley National Insurance Company	38911	INSURER B : Liberty Mutual Insurance Company	23043	INSURER C : Greenwich Insurance Company	22322	INSURER D : XL Insurance America, Inc.	24554	INSURER E :		INSURER F :	
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INSURER B : Liberty Mutual Insurance Company	23043												
INSURER C : Greenwich Insurance Company	22322												
INSURER D : XL Insurance America, Inc.	24554												
INSURER E :													
INSURER F :													
INSURED Chemtrade Chemicals US LLC 90 E Halsey Road Parsippany, NJ 07054													

COVERAGES**CERTIFICATE NUMBER:**

HOU-003386601-22

REVISION NUMBER: 7

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> SIR: \$1,000,000 GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			AGN 5700000-13	05/01/2023	05/01/2024	EACH OCCURRENCE \$ 4,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 4,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			AS1-B71-072790-063 AOS AS1-B71-072790-073 CA	05/01/2023 05/01/2023	05/01/2024 05/01/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 5,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
D	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 100,000			US00099935L123A	05/01/2023	05/01/2024	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input checked="" type="checkbox"/> N	N/A	WA2-B7D-072790-083 AOS WC2-B71-072790-013 WI	05/01/2023 05/01/2023	05/01/2024 05/01/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Pollution Legal Liability SIR: \$500,000			PEC000967415	05/01/2022	05/01/2024	Occurrence 5,000,000 Aggregate 10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The City of Oklahoma City and its participating public trusts to this Contract/Agreement whether named herein or by reference only are included as additional insured (except Workers Compensation) where required by written contract.

CERTIFICATE HOLDER

The City of Oklahoma City and
The Oklahoma City Water Utilities Trust
420 W. Main, Suite 500
Oklahoma City, OK 73102

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh USA LLC

Supplier: **CHEMTRADE CHEMICALS US LLC**

**COAGULANTS AND AIDS FOR
WATER TREATMENT PLANTS
BID FORM A
OCWUT 19-24
REQUIRED ONLY IF BIDDING FERRIC SULFATE**

SPECIFICATIONS	BIDDER'S RESPONSE
1. ANSI/NSF Standard 60?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Standard Specifications AWWA B-406-06?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Please provide the Manufacturer and Brand Name:	Chemtrade / Ferric Sulfate 60% Bulk
4. Manufactured using? Virgin Iron Ore	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Free Acid as H ₂ SO ₄ (to maintain pH 2 solution)? Maximum 4.5% as H ₂ SO ₄	3.0 % Max
6. Water Soluble Ferric Iron expressed as Fe+++? Minimum 12.0%	12 % Min
7. Water Soluble Ferrous Iron expressed as Fe++? 1.5% Maximum of the 12.0% Fe+++	0.2 % Max
8. Water Soluble Ferrous Iron expressed as Fe++? 3.0% Maximum in ferric sulfate	0.2 % Max
9. Water Insoluble Matter: Insoluble in liquid ferric sulfate? .01% Maximum	.01 % Max
10. Specific Gravity? Range 1.42 to 1.44	1.50-1.62 Range

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Supplier: CHEMTRADE CHEMICALS US LLC**CONTRACTOR/VENDOR BACKGROUND CHECKS
FOR ACCESS TO OR WORK IN CITY AND TRUST BUILDINGS AND STRUCTURES**

The City has established a policy to better secure City and/or Trust owned or operated buildings and structures by requiring background and fingerprint checks of Non-City employees as a condition precedent to entering City and/or Trust buildings and structures. **Contractor/vendor employees and agents who will be required to enter City and Trust buildings and structures to perform a City or Trust Contract will be required to obtain and provide an Oklahoma State Bureau of Investigation background and fingerprint check to the General Service Director or designee before such Contractor/Vendor employee or agent will be permitted to enter City and/or Trust buildings and structures unescorted, at their cost.**

The General Services Director will establish and maintain a list of Non-City employees authorized to enter City and/or Trust buildings and structures. Background and fingerprint records will be maintained by the General Services Department in a secure location within the City's internal network. Said records will be destroyed within sixty days of: 1) final acceptance by the City Council in the case of construction projects, 2) termination or expiration of a procurement pricing agreement, 3) termination or expiration of an engineering, architectural or planner agreement, or 4) termination or expiration of a professional services agreement, unless the Contractor/Vendor has another contractor or agreement. The City reserves the right and authorizes the General Services Director or designee to request and require any such background check be updated and resubmitted. In addition, the Contractor/Vendor acknowledges and agrees that Contractor/Vendor employees and agents will be asked to verify their identity with a government issued picture identification (Driver's License, Passport, Oklahoma issued Identification Card) from the employee or agent's state of residence to enter City and/or Trust owned or operated buildings and structures.

Arrest and/or conviction records may disqualify Contractor/Vendor employees or agents from access or for work in City or Trust buildings and structures.

In addition to the Sex Offenders Registration Act (57 O.S. Section 581 *et seq.*) and the Mary Rippey Violent Crime Offenders Registration Act (57 O.S. Section 591 *et seq.*), the following criteria will be used when reviewing Contractor/Vendor employee or agent requests for building access:

- (a) Any unpardoned felony conviction or plea of nolo contendere may be disqualifying, depending on the nature of the conviction and the relation to the scope of the contract or price agreement, except under the following circumstances:
1. Access to City or Trust buildings and structures is contingent upon successful completion of two (2) years of a deferred or suspended sentence (if the sentence exceeds two (2) years), otherwise, after successfully serving the complete sentence. Applicants must submit two (2) favorable written references, one (1) of which must be from an employer with whom the individual has worked within the last two years. Situations where the applicant is unable to provide a written reference from an employer with whom the individual has worked within the last two (2) years will be reviewed by the General Services Director or designee on a case-by-case basis.
 2. Applicants convicted of a felony and ordered to serve time with the Department of Corrections may be eligible for access, depending on the nature of the conviction and the position sought, two (2) years from the date of parole. Applicants must submit two (2) favorable written references, one (1) of which must be from an employer with whom he or

she has worked within the last two (2) years will be reviewed by the General Services Director or designee on a case-by-case basis.

- (b) Any unpardoned conviction(s) involving the following offenses may be disqualifying: moral turpitude; non-consensual sex acts; distribution or trafficking of controlled dangerous substances; assault and battery with a dangerous weapon, or any offense involving a minor as a victim.
- (c) Any applicant who has been convicted of a felony, is a current defendant of a Victim Protection Order (VPO) or has been convicted of a misdemeanor crime of Domestic Violence, will not be considered for facility access. Misdemeanor convictions and traffic violations will be evaluated on an individual basis and may be disqualifying.
- (d) Any applicant with a pending felony or misdemeanor charge (other than minor traffic violations) will be ineligible for access, until a final disposition of the charge is made.
- (e) Any conviction that has been pardoned or expunged cannot be considered in a facility access decision.

If it is determined that information obtained through the applicant's OSBI criminal records check makes the applicant unsuitable for access to City or Trust buildings or structures, the General Services Department will notify the applicant immediately and provide a copy of any criminal record information.

- (a) The applicant will be given seven (7) business days to provide information that negates the validity and relevance of the criminal record. If the information obtained through the criminal records check cannot be invalidated by the applicant, the applicant will be denied facility access.
- (b) In determining an applicant's suitability for facility access, the General Services Department will consider information including, but not limited to the following:
 - 1. Relevance of the crime to the proposed work to be performed.
 - 2. Nature of the work to be performed;
 - 3. Recency of the conviction;
 - 4. Sensitivity of and potential risk to accessible information, systems, or equipment; and
 - 5. Potential risk or threat to City employees.

Upon approval of a contract or agreement by the City Council/Trust, the successful Contractor(s)/Vendor(s) will be required to submit to the General Services Department the following completed documents for **each** employee requiring access to City or Trust buildings and structures to fulfill the terms of the contract or agreement.

- 1. Non-Employee Building Access Request Form – available upon request at (405) 297-2123
- 2. OSBI Criminal History Information Request Portal Response – available at <http://www.ok.gov/osbi/CriminalHistory/CHIRP>

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CHEMTRADE CHEMICALS US LLC

Bid Contact **Elizabeth Ryno**
bids@chemtradelogistics.com
Ph 800-441-2659

Address **90 EAST HALSEY ROAD, SUITE 200**
PARSIPPANY, NJ 07054

Bid Notes **PLEASE FIND ATTACHED IN THE BODY OF THE BID SUBMITTAL: FERRIC SULFATE & HYPER+ION 3530 SPEC SHEETS, DELIVERY TIMES, CONTACT INFO, ADDENDUM 1, W-9 AND OUR WARRANTY.**

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs
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OCWUT 19-24--01-01	Group 1, Product Details: Manufacturers ANSI/NSF 60 Certification	Supplier Product Code: Supplier Notes: YES	First Offer -	1 / each	Y	Y
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OCWUT 19-24--01-02	Group 1, Product Details: Distributors ANSI/NSF 60 Certification	Supplier Product Code: Supplier Notes: NO	First Offer -	1 / each	Y	
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OCWUT 19-24-01-03	Group 1, Product Details: Bid Price Per lbs.	Supplier Product Code: Supplier Notes: N/B NO BID - PER ADDENDUM 1 PRICING NOT REQUIRED IN THIS FIELD HOWEVER THE SYSTEM WILL NOT ALLOW YOU TO REMOVE THIS LINE OR ALLOW YOU TO REMOVE.	First Offer - \$0.00	1 / pound	\$0.00	Y
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OCWUT 19-24-01-04	Group 1, Product Details: Bid price Per lbs. for 55 Gallon Drum	Supplier Product Code: 11880 Supplier Notes: Product being bid on is Chemtrade's Ferric Sulfate 60%. For conversion purpose only, price equates to \$730.00/ton.	First Offer - \$0.365	1 / pound	\$0.365	Y	Y
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OCWUT 19-24--01-05	Group 1, Product Details: Bid price Per lbs. for Totes	Supplier Product Code: 11881 Supplier Notes: Product being bid on is Chemtrade's Ferric Sulfate 60%. For conversion purpose only, price equates to \$1,750.00/ton.	First Offer - \$0.875	1 / pound	\$0.875	Y	Y
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Lot Total **\$1.24**

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs
OCWUT 19-24--02-01	Group 1 Product Details: Bid price Per lbs. for Bulk Quantity	Supplier Product Code: 12853 Supplier Notes: Product being bid on is	First Offer - \$0.1545	1 / pound	\$0.1545	Y Y

Chemtrade's Ferric
Sulfate 60%.
For conversion purpose
only, price equates to
\$309.00/ton.

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					Lot Total	\$0.1545	
Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs	
OCWUT 19-24--03-01	Group 2, Product Details: Bid Price Per lbs.	Supplier Product Code: Supplier Notes: N/B NO BID - PER ADDENDUM 1 PRICING NOT REQUIRED IN THIS FIELD HOWEVER THE SYSTEM WILL NOT ALLOW YOU TO REMOVE THIS LINE OR ACCEPT "N/B" AS A RESPONSE	First Offer - \$0.00	1 / pound	\$0.00	Y	
OCWUT 19-24--03-02	Group 2, Product Details: Bid price Per lbs. for 55 Gallon Drum	Supplier Product Code: 11621 Supplier Notes: Product being bid on is Chemtrade's Hyper+ion 3530. Based on a 550/lb net weight drum.	First Offer - \$0.95	1 / pound	\$0.95	Y	Y

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OCWUT 19-24-03-03	Group 2, Product Details: Bid price Per lbs. for Totes	Supplier Product Code: 11956 Supplier Notes: Product being bid on is Chemtrade's Hyper+ion 3530. Based on a 2500/lb net weight tote.	First Offer - \$0.95	1 / pound	\$0.95	Y	Y
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OCWUT 19-24-03-04	Group 2, Product Details: Bid price Per lbs. for Bulk Quantity	Supplier Product Code: 11620 Supplier Notes: Product being bid on is Chemtrade's Hyper+ion 3530. For conversion purpose only, price equates to \$1,420.00/ton.	First Offer - \$0.71	1 / pound	\$0.71	Y	Y
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					Lot Total	\$2.61
Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs
OCWUT 19-24-04-01	Group 3, Product Details: Bid Price Per lbs.	Supplier Product Code: Supplier Notes: N/B NO BID - THE SYSTEM WILL NOT ALLOW YOU TO REMOVE THIS LINE OR ACCEPT "N/B" AS A RESPONSE	First Offer - \$0.00	1 / pound	\$0.00	Y
OCWUT 19-24-04-02	Group 3, Product Details: Bid price Per lbs. for 55 Gallon Drum	Supplier Product Code: Supplier Notes: N/B NO BID - THE SYSTEM WILL NOT ALLOW YOU TO REMOVE THIS LINE OR ACCEPT "N/B" AS A RESPONSE .	First Offer - \$0.00	1 / pound	\$0.00	Y
OCWUT 19-24-04-03	Group 3, Product Details: Bid price Per lbs. for Totes	Supplier Product Code: Supplier Notes: N/B NO BID - THE SYSTEM WILL	First Offer - \$0.00	1 / pound	\$0.00	Y

NOT ALLOW YOU TO
REMOVE THIS LINE OR OR
ACCEPT "N/B" AS A
RESPONSE

OCWUT 19-24--04-04	Group 3, Product Details: Bid price Per lbs. for Bulk Quantity	Supplier Product Code: Supplier Notes: N/B NO BID - THE SYSTEM WILL NOT ALLOW YOU TO REMOVE THIS LINE OR ACCEPT "N/B" AS A RESPONSE	First Offer - \$0.00	1 / pound	\$0.00	Y
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				Lot Total	\$0.00		
Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs	
OCWUT 19-24--05-01	Group 4, Delivery: Delivery Standard - Monday through Friday	Supplier Product Code: Supplier Notes: FERRIC SULFATE: 2 - 4 DAYS A.R.O. POLYMER (HYPER+ION 3530): 5 - 7 DAYS A.R.O.	First Offer -	1 / day	Y	Y	

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OCWUT 19-24-05-02	Group 4, Delivery: Delivery Peak Season	Supplier Product Code:	First Offer -	1 / day	Y
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Supplier Notes:
FERRIC SULFATE: 2 - 4
DAYS A.R.O.

POLYMER (HYPER+ION
3530): 5 - 7 DAYS A.R.O

OCWUT 19-24-05-03	Group 4, Delivery: Delivery Emergency	Supplier Product Code:	First Offer -	1 / day	Y
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Supplier Notes: BULK
DELIVERIES: 24 - 48
HOURS

DRUM/TOTE
DELIVERIES: 4 - 5 DAYS
A.R.O.

Lot Total	\$0.00
Supplier Total	\$4.0045

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CHEMTRADE CHEMICALS US LLC

Item: **Group 1, Product Details:Manufacturers ANSI/NSF 60 Certification**

Attachments

Ferric Sulfate 60 - NSF.pdf

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, January 17, 2024** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

[http://info.nsf.org/Certified/PwsChemicals/Listings.asp?
CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC
(formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>)

Facility : East St. Louis, IL

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 60%

Ferric Sulfate Solution

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

600mg/L

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Liquid Ferric Sulfate

Coagulation & Flocculation

600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 4

Processing time was 0 seconds

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>)

Facility : Celina, TX

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 55%

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

Ferric Sulfate 60%	Coagulation & Flocculation	600mg/L
Ferric Sulfate Solution	Coagulation & Flocculation	600mg/L
Liquid Ferric Sulfate	Coagulation & Flocculation	600mg/L

Number of matching Manufacturers is 1
Number of matching Products is 5
Processing time was 0 seconds

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CHEMTRADE CHEMICALS US LLC

Item: **Group 1, Product Details:Group 1, Product Details:Bid price Per lbs. for Totes**

Attachments

Ferric Sulfate 60 - spec sheets.pdf

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Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion®:	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.


Elizabeth Ryno
Marketing Specialist

AWWA multiple products

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**CHEMTRADE ANALYTICAL SERVICES LABORATORY
REPORT OF ANALYSIS**

To: City of Oklahoma City
cc: Beth Ryno

Lab. Log # 2121304

SAMPLES: 60% Ferric Sulfate - Semi-Annual Audit
Lot# 2121304

ORIGIN: Celina

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
Al	119	% Ferric (Fe3+)	12.1
As	<2	% Ferrous (Fe2+)	0.14
Ba	<1	% H2SO4	<0.1
Be	1	% Insolubles (by wt)	<0.001
Ca	63		
Cd	<1	Appearance	brown
Co	14		
Cr	2		
Cu	1		
Hg	<0.5		
K	<1		
Mg	142		
Mn	42		
Mo	<1		
Na	14		
Ni	22		
P	7		
Pb	<1.5		
Sb	<1.5		
Se	<1		
Si	6		
Sn	<1		
Sr	<1		
Ti	75		
Tl	<1.5		
V	191		
Zn	1		
Zr	2		

NOTES:

Product within specification for all parameters analyzed.

Analysts **Record**
Justin Brown
Stephanie Ulman 45071.555

Report Date
6/1/2023
BR 02/27/2024

Chemtrade is not engaged in the business of consulting or providing technical, operational or safety advice for a fee. Any such advice provided herein has been furnished as an accommodation and without charge and is made without any warranty of representation as to its completeness, accuracy, fitness for a particular purpose or any other matter. The recipient's use or non-use of such advice is made solely at the discretion and risk of the recipient.

2/27/2024;
2121304 Celina Ferric (1)

**CHEMTRADE**<http://www.chemtradelogistics.com>

Liquid Ferric Sulfate, 60%

PRODUCT DATA SHEET

CHARACTERISTICS

Liquid Ferric Sulfate, 60% is a reddish brown colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Aqueous solution of ferric sulfate		
C.A.S.	10028-22-5 (Ferric sulfate)		
	pH (neat)	Less than 1.0	
	Specific Gravity @ 21°C (70°F)	1.50 - 1.62	
	Freezing Point	Less than -50°C (< -58°F)	
	Density, lbs./gal., US	12.5 - 13.5	
	Soluble Ferric Iron (Fe ⁺³), %	12	

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge conditioning, compaction and volume reduction. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport Bulk car 275 US gal. one-way container 55 US gal. plastic drum

SHIPPING REGULATIONS (US DOT / TDG)

Proper Shipping Name:

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Ferric Sulfate)

Hazard Class: 8

ID Number: UN3264

Packing Group: III

The EPA reportable quantity (RQ) for ferric sulfate is 1,000 lbs.

PRODUCT SAFETY INFORMATION

Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-7000P

Revision Date: April 1, 2022

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.

**Ferric Sulfate, 60%**
Safety Data SheetSafety Data Sheet #: CHE-7000S
Revision Date: October 24, 2023

Version: 8.0

1. Identification**Product identifier****Product Identity**

Ferric Sulfate 60%

Other means of identification

Ferric Sulfate, 60%

Product Form

Mixture

Relevant identified uses of the substance or mixture and uses advised against

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

Details of the supplier of the safety data sheet**Company Name**

Chemtrade Logistics Inc. (Canada)
155 Gordon Baker Road Suite 300
Toronto, Ontario M2H 3N5

Chemtrade Logistics Inc. (US)
90 East Halsey Road, Suite 200
Parsippany, NJ 07054

Emergency**24 hour Emergency Telephone No.**

Chemtrade Emergency Contact: (866) 416-4404
(Toronto)

CHEMTREC +1-800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure,
or Accident, call CHEMTREC – Day or Night

Customer Service:

For SDS Info: (416) 496-5856
www.chemtradelogistics.com

2. Hazard(s) identification

May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition

Classification of the substance or mixture

Metal corrosion; H290

May be corrosive to metals.

Acute toxicity(oral), category 4; H302

Harmful if swallowed.

Skin corrosion/irritation category 2; H315

Causes skin irritation.

Serious eye damage / eye irritation, category 1;
H318

Causes serious eye damage.

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Ferric Sulfate, 60%**Safety Data Sheet****Label elements****Danger**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P234 Keep only in original container.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, eye protection, and face protection.

[Response]:

P330 IF SWALLOWED: Rinse mouth.

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER, doctor or physician.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P332+313 If skin irritation occurs: Get medical attention.

P362+364 Take off contaminated clothing and wash it before reuse.

P390 Absorb spillage to prevent material damage.

[Storage]:

P406 Store in a corrosive resistant, container with a resistant inner liner.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

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Ferric Sulfate, 60%**Safety Data Sheet****3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Water CAS Number: 7732-18-5	30 - 55	Not classified	No additional notes
Ferric sulfate CAS Number: 0010028-22-5 Synonyms: Sulfuric acid, iron(3+) salt (3:2) as Fe2(SO4)3•9H2O (Dry Ferric Sulfate)	45 - 70	Acute toxicity(oral), category 4;H302 Skin corrosion/irritation category 2;H315 Serious eye damage / eye irritation, category 1;H318 Metal corrosion;H290	No additional notes

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

The specific chemical identity and/or exact percentage of composition are withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Section 4. First aid measures**Description of first aid measures****General**

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 30 minutes, holding the eyelids apart and seek medical attention. Remove contact lenses, if present and easy to do.
Continue rinsing.

Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Drench affected area with water for at least 30 minutes.
Obtain medical attention if irritation develops or persists.

Ingestion

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed**Overview****Acute Health Effects**

Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.
EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)
SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.
INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)
INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed.
Causes severe skin irritation and eye damage.

Ferric Sulfate, 60%**Safety Data Sheet**

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.
See section 2 for further details.

Eyes	Causes serious eye damage.
Skin	Causes skin irritation.
Ingestion	Harmful if swallowed.
Chronic effects	Not available, none known.

Section 5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable extinguishing media: Do not use water jet, or heavy water stream. Use of heavy stream of water may spread fire.

Special hazards arising from the substance or mixture

Hazardous decomposition: When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Keep only in original container.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean up immediately after fire. No smoking.

Fire Hazard: Product is not flammable but may burn at high temperatures.

Hazardous Combustion Products: Sulfur oxides, corrosive vapours; sulfur oxides are toxic.

Explosion Hazard: Product is not explosive. Contact with metallic substances may release flammable hydrogen gas.

Firefighting Instructions: Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. **Exercise caution when fighting any chemical fire.**

Hazardous reactions will not occur under normal conditions.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

ERG Guide No. 154

Section 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

General Measures: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See Section 8.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Ferric Sulfate, 60%**Safety Data Sheet**

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

Environmental precautions

Prevent entry to sewers and public waters. Avoid release to environment.

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Methods and material for containment and cleaning up

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

Methods for Clean up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area. Contain, dilute cautiously with water, and neutralize with soda ash or lime.

Section 7. Handling and storage**Precautions for safe handling**

Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details. - [Prevention]:

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Comply with applicable regulations.

Incompatible materials: Strong acids, strong bases, strong oxidizers. Alkalis. Metals.

See section 2 for further details. - [Storage]:

Specific end use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

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Ferric Sulfate, 60%

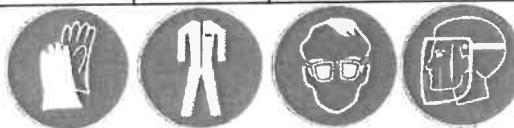
Safety Data Sheet

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit



Exposure controls

Respiratory

Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

Eyes

Chemical safety goggles and face shield.

Skin

Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.

Engineering Controls

Exposure Controls Appropriate Engineering Controls: Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Other Work Practices

Put on appropriate personal protective equipment. Chemically compatible gloves, protective clothing, chemical resistant safety goggles, face shield. Insufficient ventilation: wear respiratory protection. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection

Ferric Sulfate, 60%**Safety Data Sheet**

equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details.

Section 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical State	liquid
Color	Reddish brown
Odor	Odorless
Melting point / freezing point	less than -50 °C (< -58 °F)
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No available information
pH	<1
Viscosity (cSt)	No available information
Solubility in Water	Completely Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapour pressure (Pa)	No available information
Relative Density	No available information
Vapour Density	No available information
Evaporation rate (Ether = 1)	No available information
Specific Gravity	1.50 - 1.62
Density (lbs/US gal)	12.5 - 13.5
Other information	
No other relevant information.	

Section 10. Stability and reactivity**Reactivity**

Hazardous Polymerization will not occur.

Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions

May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Conditions to avoid

Ferric Sulfate, 60%**Safety Data Sheet**

Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible materials

Strong acids, strong bases, strong oxidizers. Alkalies. Metals.

Hazardous decomposition products

When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Section 11. Toxicological information**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Product Acute Toxicity Estimates	714	2857	NA	NA	NA

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ferric sulfate - (10028-22-5)	500.00, Rat - Category: 4	2,000.00, Rat - Category: 4	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

Symptoms and effects, both acute and delayed:

Acute Health Effects: Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.

Ferric Sulfate, 60%**Safety Data Sheet**

EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)

SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.

INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)

INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed. Causes severe skin irritation and eye damage.

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.

Most likely route(s) of exposure Skin, Eyes

Eyes Causes serious eye damage.

Skin Causes skin irritation.

Ingestion Harmful if swallowed.

Chronic effects Not available, none known.

Section 12. Ecological information**Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ferric sulfate - (10028-22-5)	133.00, Gambusia affinis	12.39, Daphnia longispina	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations**Waste treatment methods**

Dispose of waste material in accordance with all local, regional, federal, provincial, state, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ferric Sulfate, 60%**Safety Data Sheet****Section 14. Transport information**

Classification Method: Classified as per Part 2, Sections 2.1 - 2.8 of the Transportation of Dangerous Goods Regulations.

	DOT / TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN3264	UN3264	UN3264
UN proper shipping name	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate), 8, III	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)
Transport hazard class(es)	TDG Hazard Class: 8 Sub Class: Not Applicable	IMDG: 8 Sub Class: Not Applicable	Air Class: 8 Sub Class: Not Applicable
Packing group III		III	III
Environmental hazards	Marine Pollutant: No;		
Special precautions for user	No available information		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

NFPA Ranking

Health (blue) :3

Fire (red) :0

Reactivity (yellow) :0

Special (white) :ACID



This product has been classified in accordance with the hazard criteria Hazardous Products Regulations (SOR/2015-17) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA):

Ferric sulfate (Present)

Water (Present)

EPCRA 311/312 Chemicals and RQs (lbs):

Ferric sulfate (1,000.00)

Canadian Domestic Substance List (DSL):

Ferric sulfate

Water

Ferric Sulfate, 60%**Safety Data Sheet****Canadian Non-Domestic Substance List (NDSL):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Ferric sulfate

Pennsylvania RTK Substances (>1%):

Ferric sulfate

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name (CAS Number)	US TSCA	Australia AICS	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Ferric sulfate (0010028-22-5)	Yes	Yes	Yes	Yes	No	No	No	Yes

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Ferric sulfate (0010028-22-5)	Yes	Yes	No	No	No	No	Yes	Yes

Section 16. Other information

Revision Date 10/24/2023

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products.

Ferric Sulfate, 60%**Safety Data Sheet**

Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Revision Summary

Section :	Modification
2	Updated skin corrosion classification
4	Updated language
11	Updated information

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.





The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, January 17, 2024** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>)

Facility : East St. Louis, IL

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 60%

Ferric Sulfate Solution

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

600mg/L

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Liquid Ferric Sulfate

Coagulation & Flocculation

600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 4

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

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<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Celina, TX

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 55%

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

Ferric Sulfate 60%	Coagulation & Flocculation	600mg/L
Ferric Sulfate Solution	Coagulation & Flocculation	600mg/L
Liquid Ferric Sulfate	Coagulation & Flocculation	600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 5

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CHEMTRADE CHEMICALS US LLC

Item: **Group 1, Product Details:Group 1, Product Details:Group 1, Product Details:**Bid price Per lbs. for 55 Gallon Drum

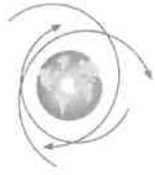
Attachments

Ferric Sulfate 60 - spec sheets.pdf

Letter of Authorization.pdf

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Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion®:	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.


Elizabeth Ryno
Marketing Specialist

AWWA multiple products

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**CHEMTRADE****ANALYTICAL SERVICES LABORATORY
REPORT OF ANALYSIS****To:** City of Oklahoma City
cc: Beth Ryno**Lab. Log #** 2121304**SAMPLES:** 60% Ferric Sulfate - Semi-Annual Audit
Lot# 2121304**ORIGIN:** Celina

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
Al	119	% Ferric (Fe3+)	12.1
As	<2	% Ferrous (Fe2+)	0.14
Ba	<1	% H2SO4	<0.1
Be	1	% Insolubles (by wt)	<0.001
Ca	63		
Cd	<1		
Co	14	Appearance	brown
Cr	2		
Cu	1		
Hg	<0.5		
K	<1		
Mg	142		
Mn	42		
Mo	<1		
Na	14		
Ni	22		
P	7		
Pb	<1.5		
Sb	<1.5		
Se	<1		
Si	6		
Sn	<1		
Sr	<1		
Ti	75		
Tl	<1.5		
V	191		
Zn	1		
Zr	2		

NOTES:

Product within specification for all parameters analyzed.

Analysts	Record
Justin Brown	
Stephanie Ulman	45071.555

Report Date
6/1/2023
BR 02/27/2024

Chemtrade is not engaged in the business of consulting or providing technical, operational or safety advice for a fee. Any such advice provided herein has been furnished as an accommodation and without charge and is made without any warranty of representation as to its completeness, accuracy, fitness for a particular purpose or any other matter. The recipient's use or non-use of such advice is made solely at the discretion and risk of the recipient.

2/27/2024;
2121304 Celina Ferric (1)

**CHEMTRADE**

http://www.chemtradelogistics.com

Liquid Ferric Sulfate, 60%

PRODUCT DATA SHEET

CHARACTERISTICS

Liquid Ferric Sulfate, 60% is a reddish brown colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Aqueous solution of ferric sulfate		
C.A.S.	10028-22-5 (Ferric sulfate)		
	pH (neat)	Less than 1.0	
	Specific Gravity @ 21°C (70°F)	1.50 - 1.62	
	Freezing Point	Less than -50°C (< -58°F)	
	Density, lbs./gal., US	12.5 - 13.5	
	Soluble Ferric Iron (Fe ⁺³), %	12	

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge conditioning, compaction and volume reduction. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport Bulk car 275 US gal. one-way container 55 US gal. plastic drum

SHIPPING REGULATIONS (US DOT / TDG)

Proper Shipping Name:

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Ferric Sulfate)

Hazard Class: 8

ID Number: UN3264

Packing Group: III

The EPA reportable quantity (RQ) for ferric sulfate is 1,000 lbs.

PRODUCT SAFETY INFORMATION

Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-7000P

Revision Date: April 1, 2022

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.

**Ferric Sulfate, 60%**
Safety Data SheetSafety Data Sheet #: CHE-7000S
Revision Date: October 24, 2023

Version: 8.0

1. Identification**Product identifier****Product Identity**

Ferric Sulfate 60%

Other means of identification

Ferric Sulfate, 60%

Product Form

Mixture

Relevant identified uses of the substance or mixture and uses advised against

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

Details of the supplier of the safety data sheet**Company Name**

Chemtrade Logistics Inc. (Canada)
155 Gordon Baker Road Suite 300
Toronto, Ontario M2H 3N5

Chemtrade Logistics Inc. (US)
90 East Halsey Road, Suite 200
Parsippany, NJ 07054

Emergency**24 hour Emergency Telephone No.**

Chemtrade Emergency Contact: (866) 416-4404
(Toronto)

CHEMTREC +1-800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure,
or Accident, call CHEMTREC – Day or Night

Customer Service:

For SDS Info: (416) 496-5856
www.chemtradelogistics.com

2. Hazard(s) identification

May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition

Classification of the substance or mixture

Metal corrosion; H290

May be corrosive to metals.

Acute toxicity(oral), category 4; H302

Harmful if swallowed.

Skin corrosion/irritation category 2; H315

Causes skin irritation.

Serious eye damage / eye irritation, category 1;
H318

Causes serious eye damage.

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Ferric Sulfate, 60%**Safety Data Sheet****Label elements****Danger**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P234 Keep only in original container.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, eye protection, and face protection.

[Response]:

P330 IF SWALLOWED: Rinse mouth.

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER, doctor or physician.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P332+313 If skin irritation occurs: Get medical attention.

P362+364 Take off contaminated clothing and wash it before reuse.

P390 Absorb spillage to prevent material damage.

[Storage]:

P406 Store in a corrosive resistant, container with a resistant inner liner.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

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Ferric Sulfate, 60%**Safety Data Sheet****3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Water CAS Number: 7732-18-5	30 - 55	Not classified	No additional notes
Ferric sulfate CAS Number: 0010028-22-5 Synonyms: Sulfuric acid, iron(3+) salt (3:2) as Fe2(SO4)3•9H2O (Dry Ferric Sulfate)	45 - 70	Acute toxicity(oral), category 4;H302 Skin corrosion/irritation category 2;H315 Serious eye damage / eye irritation, category 1;H318 Metal corrosion;H290	No additional notes

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

The specific chemical identity and/or exact percentage of composition are withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Section 4. First aid measures**Description of first aid measures****General**

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 30 minutes, holding the eyelids apart and seek medical attention. Remove contact lenses, if present and easy to do.
Continue rinsing.

Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Drench affected area with water for at least 30 minutes.
Obtain medical attention if irritation develops or persists.

Ingestion

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed**Overview****Acute Health Effects**

Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.
EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)
SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.
INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)
INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed.
Causes severe skin irritation and eye damage.

Ferric Sulfate, 60%**Safety Data Sheet**

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.
See section 2 for further details.

Eyes	Causes serious eye damage.
Skin	Causes skin irritation.
Ingestion	Harmful if swallowed.
Chronic effects	Not available, none known.

Section 5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable extinguishing media: Do not use water jet, or heavy water stream. Use of heavy stream of water may spread fire.

Special hazards arising from the substance or mixture

Hazardous decomposition: When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Keep only in original container.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean up immediately after fire. No smoking.

Fire Hazard: Product is not flammable but may burn at high temperatures.

Hazardous Combustion Products: Sulfur oxides, corrosive vapours; sulfur oxides are toxic.

Explosion Hazard: Product is not explosive. Contact with metallic substances may release flammable hydrogen gas.

Firefighting Instructions: Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. **Exercise caution when fighting any chemical fire.**

Hazardous reactions will not occur under normal conditions.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

ERG Guide No. 154

Section 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

General Measures: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See Section 8.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Ferric Sulfate, 60%**Safety Data Sheet**

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

Environmental precautions

Prevent entry to sewers and public waters. Avoid release to environment.

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Methods and material for containment and cleaning up

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

Methods for Clean up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area. Contain, dilute cautiously with water, and neutralize with soda ash or lime.

Section 7. Handling and storage**Precautions for safe handling**

Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details. - [Prevention]:

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Comply with applicable regulations.

Incompatible materials: Strong acids, strong bases, strong oxidizers. Alkalis. Metals.

See section 2 for further details. - [Storage]:

Specific end use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

Ferric Sulfate, 60%

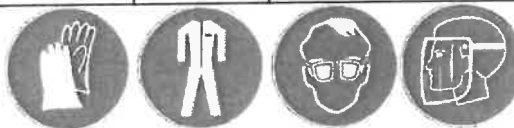
Safety Data Sheet

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit



Exposure controls

Respiratory

Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

Eyes

Chemical safety goggles and face shield.

Skin

Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.

Engineering Controls

Exposure Controls Appropriate Engineering Controls: Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Other Work Practices

Put on appropriate personal protective equipment. Chemically compatible gloves, protective clothing, chemical resistant safety goggles, face shield. Insufficient ventilation: wear respiratory protection. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection

Ferric Sulfate, 60%**Safety Data Sheet**

equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details.

Section 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical State	liquid
Color	Reddish brown
Odor	Odorless
Melting point / freezing point	less than -50 °C (< -58 °F)
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No available information
pH	<1
Viscosity (cSt)	No available information
Solubility in Water	Completely Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapour pressure (Pa)	No available information
Relative Density	No available information
Vapour Density	No available information
Evaporation rate (Ether = 1)	No available information
Specific Gravity	1.50 - 1.62
Density (lbs/US gal)	12.5 - 13.5
Other information	
No other relevant information.	

Section 10. Stability and reactivity**Reactivity**

Hazardous Polymerization will not occur.

Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions

May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Conditions to avoid

Ferric Sulfate, 60%**Safety Data Sheet**

Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible materials

Strong acids, strong bases, strong oxidizers. Alkalies. Metals.

Hazardous decomposition products

When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Section 11. Toxicological information**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Product Acute Toxicity Estimates	714	2857	NA	NA	NA

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ferric sulfate - (10028-22-5)	500.00, Rat - Category: 4	2,000.00, Rat - Category: 4	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

Symptoms and effects, both acute and delayed:

Acute Health Effects: Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.

Ferric Sulfate, 60%**Safety Data Sheet**

EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)

SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.

INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)

INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed. Causes severe skin irritation and eye damage.

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.

Most likely route(s) of exposure Skin, Eyes

Eyes Causes serious eye damage.

Skin Causes skin irritation.

Ingestion Harmful if swallowed.

Chronic effects Not available, none known.

Section 12. Ecological information**Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ferric sulfate - (10028-22-5)	133.00, Gambusia affinis	12.39, Daphnia longispina	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations**Waste treatment methods**

Dispose of waste material in accordance with all local, regional, federal, provincial, state, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ferric Sulfate, 60%**Safety Data Sheet****Section 14. Transport information**

Classification Method: Classified as per Part 2, Sections 2.1 - 2.8 of the Transportation of Dangerous Goods Regulations.

	DOT / TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN3264	UN3264	UN3264
UN proper shipping name	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate), 8, III	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)
Transport hazard class(es)	TDG Hazard Class: 8 Sub Class: Not Applicable	IMDG: 8 Sub Class: Not Applicable	Air Class: 8 Sub Class: Not Applicable
Packing group III		III	III
Environmental hazards	Marine Pollutant: No;		
Special precautions for user	No available information		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

NFPA Ranking

Health (blue) :3

Fire (red) :0

Reactivity (yellow) :0

Special (white) :ACID



This product has been classified in accordance with the hazard criteria Hazardous Products Regulations (SOR/2015-17) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA):

Ferric sulfate (Present)

Water (Present)

EPCRA 311/312 Chemicals and RQs (lbs):

Ferric sulfate (1,000.00)

Canadian Domestic Substance List (DSL):

Ferric sulfate

Water

Ferric Sulfate, 60%**Safety Data Sheet****Canadian Non-Domestic Substance List (NDSL):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Ferric sulfate

Pennsylvania RTK Substances (>1%):

Ferric sulfate

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name (CAS Number)	US TSCA	Australia AICS	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Ferric sulfate (0010028-22-5)	Yes	Yes	Yes	Yes	No	No	No	Yes

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Ferric sulfate (0010028-22-5)	Yes	Yes	No	No	No	No	Yes	Yes

Section 16. Other information

Revision Date 10/24/2023

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products.

Ferric Sulfate, 60%**Safety Data Sheet**

Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Revision Summary

Section :	Modification
2	Updated skin corrosion classification
4	Updated language
11	Updated information

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.





The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, January 17, 2024** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>)

Facility : East St. Louis, IL

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 60%

Ferric Sulfate Solution

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

600mg/L

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Liquid Ferric Sulfate

Coagulation & Flocculation

600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 4

Processing time was 0 seconds

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Celina, TX

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 55%

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

Ferric Sulfate 60%	Coagulation & Flocculation	600mg/L
Ferric Sulfate Solution	Coagulation & Flocculation	600mg/L
Liquid Ferric Sulfate	Coagulation & Flocculation	600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 5

Processing time was 0 seconds

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Chemtrade Chemicals US LLC	
Managers	<u>Address</u>
Scott Rook	90 East Halsey Road Parsippany, NJ 07054
Timothy Montgomery	90 East Halsey Road Parsippany, NJ 07054
Alan Robinson	90 East Halsey Road Parsippany, NJ 07054
<u>Officers/Position</u>	<u>Address</u>
Scott Rook – President and Chief Executive Officer	90 East Halsey Road Parsippany, NJ 07054
Rohit Bhardwaj –Treasurer and Chief Financial Officer	155 Gordon Baker Road, Suite 300 Toronto, ON M2H 3N5
Susan Paré – Corporate Secretary	155 Gordon Baker Road, Suite 300 Toronto, ON M2H 3N5
Timothy Montgomery – Group Vice-President	90 East Halsey Road Parsippany, NJ 07054
Alan Robinson – Group Vice-President	90 East Halsey Road Parsippany, NJ 07054
Bramora Rebello –Vice-President	155 Gordon Baker Road, Suite 300 Toronto, ON M2H 3N5
Joe Jayroe - Vice-President	90 East Halsey Road Parsippany, NJ 07054
Joseph F. Leary – Assistant Treasurer	90 East Halsey Road Parsippany, NJ 07054
Eugene Fung – Assistant Treasurer	155 Gordon Baker Road, Suite 300 Toronto, ON M2H 3N5

Effective January 3, 2024

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DELEGATION OF AUTHORITY

I, Scott Rook, President and Chief Executive of Chemtrade Chemicals US LLC, a Delaware limited liability company ("Chemtrade"), do hereby delegate and appoint the following agents of Chemtrade to execute all municipal contracts and instruments, including bids, proposals and quotations, which in the ordinary course of business are processed by the Marketing Group of the company:

Parul Kachhia-Patel: Lisa Brownlee: Paul Peters: Elizabeth Ryno: Leilina Gossa:
Christine LaSala: Delana Peralta: Michele Schroeder: Marie-Josée Joly

Set forth below is a certified copy of the resolution of Chemtrade authorizing such action.

Dated as of the 27th day of February, 2024.

Scott Rook
President and Chief Executive Officer

CERTIFICATE OF SECRETARY

I, Susan Pare, hereby certify that I am the Corporate Secretary of Chemtrade Chemicals US LLC ("Chemtrade") and that set forth below is a true and correct copy of the resolution of the Board of Managers of Chemtrade, adopted by unanimous written consent as of the 10th day of November, 2003 and that the same has not been modified or revoked and is on the date hereof in full force and effect:

RESOLVED that any officer of the Company be, and he hereby is, authorized to delegate, with the right of further delegation, to any other officer, employee or agent of the Company, all or any part of the authority granted to them by the Board of Managers; and that any such delegations may be general or specific and subject to such limitations and restrictions as the delegating officer shall determine.

I FURTHER CERTIFY that Scott Rook is the duly elected President and Chief Executive Officer of Chemtrade and holds such offices on the date hereof, that Mr. Rook is, in his capacity as President and Chief Executive Officer is authorized to represent and bind Chemtrade in all matters including, but not limited to, contracts and that set forth below is the genuine signature of such officer:

Scott Rook
President and Chief Executive Officer

IN WITNESS WHEREOF, I have hereunto set my hand and have caused the seal of the Company to be affixed effective this 27th day of February, 2024.

Susan Pare
Corporate Secretary

90 East Halsey Road
Parsippany, NJ 07054
Tel: 800-441-2659

CHEMTRADE CHEMICALS US LLC

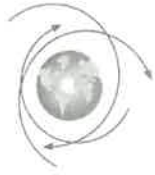
Item: **Group 1 Product Details:Group 1 Product Details:Group 1 Product Details:Group 1 Product Details:Bid price Per lbs.
for Bulk Quantity**

Attachments

Ferric Sulfate 60 - spec sheets.pdf

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Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion [®] :	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.



Elizabeth Ryno
Marketing Specialist

AWWA multiple products

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**CHEMTRADE****ANALYTICAL SERVICES LABORATORY
REPORT OF ANALYSIS****To:** City of Oklahoma City
cc: Beth Ryno**Lab. Log #** 2121304**SAMPLES:** 60% Ferric Sulfate - Semi-Annual Audit
Lot# 2121304**ORIGIN:** Celina

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
Al	119	% Ferric (Fe ³⁺)	12.1
As	<2	% Ferrous (Fe ²⁺)	0.14
Ba	<1	% H ₂ SO ₄	<0.1
Be	1	% Insolubles (by wt)	<0.001
Ca	63		
Cd	<1		
Co	14	Appearance	brown
Cr	2		
Cu	1		
Hg	<0.5		
K	<1		
Mg	142		
Mn	42		
Mo	<1		
Na	14		
Ni	22		
P	7		
Pb	<1.5		
Sb	<1.5		
Se	<1		
Si	6		
Sn	<1		
Sr	<1		
Ti	75		
Tl	<1.5		
V	191		
Zn	1		
Zr	2		

NOTES:

Product within specification for all parameters analyzed.

Analysts	Record
Justin Brown	
Stephanie Ulman	45071.555

Report Date
6/1/2023
BR 02/27/2024

Chemtrade is not engaged in the business of consulting or providing technical, operational or safety advice for a fee. Any such advice provided herein has been furnished as an accommodation and without charge and is made without any warranty of representation as to its completeness, accuracy, fitness for a particular purpose or any other matter. The recipient's use or non-use of such advice is made solely at the discretion and risk of the recipient.

2/27/2024;
2121304 Celina Ferric (1)

**CHEMTRADE**

http://www.chemtradelogistics.com

Liquid Ferric Sulfate, 60%

PRODUCT DATA SHEET

CHARACTERISTICS

Liquid Ferric Sulfate, 60% is a reddish brown colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Aqueous solution of ferric sulfate		
C.A.S.	10028-22-5 (Ferric sulfate)		
	pH (neat)	Less than 1.0	
	Specific Gravity @ 21°C (70°F)	1.50 - 1.62	
	Freezing Point	Less than -50°C (< -58°F)	
	Density, lbs./gal., US	12.5 - 13.5	
	Soluble Ferric Iron (Fe ⁺³), %	12	

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge conditioning, compaction and volume reduction. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport Bulk car 275 US gal. one-way container 55 US gal. plastic drum

SHIPPING REGULATIONS (US DOT / TDG)

Proper Shipping Name:

Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Ferric Sulfate)

Hazard Class: 8

ID Number: UN3264

Packing Group: III

The EPA reportable quantity (RQ) for ferric sulfate is 1,000 lbs.

PRODUCT SAFETY INFORMATION

Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-7000P

Revision Date: April 1, 2022

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter, including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.

**Ferric Sulfate, 60%**
Safety Data SheetSafety Data Sheet #: CHE-7000S
Revision Date: October 24, 2023

Version: 8.0

1. Identification**Product identifier****Product Identity**

Ferric Sulfate 60%

Other means of identification

Ferric Sulfate, 60%

Product Form

Mixture

Relevant identified uses of the substance or mixture and uses advised against

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

Details of the supplier of the safety data sheet**Company Name**

Chemtrade Logistics Inc. (Canada)
155 Gordon Baker Road Suite 300
Toronto, Ontario M2H 3N5

Chemtrade Logistics Inc. (US)
90 East Halsey Road, Suite 200
Parsippany, NJ 07054

Emergency**24 hour Emergency Telephone No.**

Chemtrade Emergency Contact: (866) 416-4404
(Toronto)

CHEMTREC +1-800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure,
or Accident, call CHEMTREC – Day or Night

Customer Service:

For SDS Info: (416) 496-5856
www.chemtradelogistics.com

2. Hazard(s) identification

May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition

Classification of the substance or mixture

Metal corrosion; H290

May be corrosive to metals.

Acute toxicity(oral), category 4; H302

Harmful if swallowed.

Skin corrosion/irritation category 2; H315

Causes skin irritation.

Serious eye damage / eye irritation, category 1;
H318

Causes serious eye damage.

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Ferric Sulfate, 60%**Safety Data Sheet****Label elements****Danger**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P234 Keep only in original container.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, eye protection, and face protection.

[Response]:

P330 IF SWALLOWED: Rinse mouth.

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER, doctor or physician.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P332+313 If skin irritation occurs: Get medical attention.

P362+364 Take off contaminated clothing and wash it before reuse.

P390 Absorb spillage to prevent material damage.

[Storage]:

P406 Store in a corrosive resistant, container with a resistant inner liner.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

2.3. Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

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Ferric Sulfate, 60%**Safety Data Sheet****3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the Hazardous Products Regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Water CAS Number: 7732-18-5	30 - 55	Not classified	No additional notes
Ferric sulfate CAS Number: 0010028-22-5 Synonyms: Sulfuric acid, iron(3+) salt (3:2) as Fe2(SO4)3•9H2O (Dry Ferric Sulfate)	45 - 70	Acute toxicity(oral), category 4;H302 Skin corrosion/irritation category 2;H315 Serious eye damage / eye irritation, category 1;H318 Metal corrosion;H290	No additional notes

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

The specific chemical identity and/or exact percentage of composition are withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

Section 4. First aid measures**Description of first aid measures****General**

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 30 minutes, holding the eyelids apart and seek medical attention. Remove contact lenses, if present and easy to do.
Continue rinsing.

Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Drench affected area with water for at least 30 minutes.
Obtain medical attention if irritation develops or persists.

Ingestion

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed**Overview****Acute Health Effects**

Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.
EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)
SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.
INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)
INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed.
Causes severe skin irritation and eye damage.

Ferric Sulfate, 60%**Safety Data Sheet**

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.
See section 2 for further details.

Eyes	Causes serious eye damage.
Skin	Causes skin irritation.
Ingestion	Harmful if swallowed.
Chronic effects	Not available, none known.

Section 5. Fire-fighting measures**Extinguishing media**

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable extinguishing media: Do not use water jet, or heavy water stream. Use of heavy stream of water may spread fire.

Special hazards arising from the substance or mixture

Hazardous decomposition: When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Keep only in original container.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean up immediately after fire. No smoking.

Fire Hazard: Product is not flammable but may burn at high temperatures.

Hazardous Combustion Products: Sulfur oxides, corrosive vapours; sulfur oxides are toxic.

Explosion Hazard: Product is not explosive. Contact with metallic substances may release flammable hydrogen gas.

Firefighting Instructions: Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. **Exercise caution when fighting any chemical fire.**

Hazardous reactions will not occur under normal conditions.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

ERG Guide No. 154

Section 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

General Measures: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. See Section 8.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Ferric Sulfate, 60%**Safety Data Sheet**

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

Environmental precautions

Prevent entry to sewers and public waters. Avoid release to environment.

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Methods and material for containment and cleaning up

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

Methods for Clean up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area. Contain, dilute cautiously with water, and neutralize with soda ash or lime.

Section 7. Handling and storage**Precautions for safe handling**

Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.

Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details. - [Prevention]:

Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated place. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Comply with applicable regulations.

Incompatible materials: Strong acids, strong bases, strong oxidizers. Alkalis. Metals.

See section 2 for further details. - [Storage]:

Specific end use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Restrictions on use:

Not available

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Ferric Sulfate, 60%

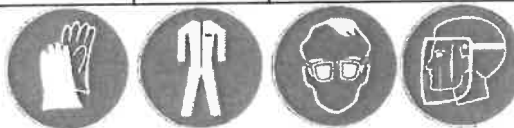
Safety Data Sheet

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	ACGIH	No Established Limit
		OSHA	No Established Limit
		NIOSH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit



Exposure controls

Respiratory

Use NIOSH/MSHA approved respirator, following manufacturer's recommendations when concentrations exceed permissible exposure limits.

Eyes

Chemical safety goggles and face shield.

Skin

Chemical resistant clothing such as coveralls/apron and boots should be worn. Chemical impervious gloves required.

Engineering Controls

Exposure Controls Appropriate Engineering Controls: Emergency eyewash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Other Work Practices

Put on appropriate personal protective equipment. Chemically compatible gloves, protective clothing, chemical resistant safety goggles, face shield. Insufficient ventilation: wear respiratory protection. Use good personal hygiene practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Promptly remove soiled clothing and wash thoroughly before reuse.

Use only outdoors or in a well-ventilated area. Do not breathe mist, spray, and vapours.

Do not get in eyes, on skin, or on clothing. Use appropriate personal protection

Ferric Sulfate, 60%**Safety Data Sheet**

equipment (PPE). Wear protective gloves, eye protection, face protection (refer to section 8 for more details).

See section 2 for further details.

Section 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical State	liquid
Color	Reddish brown
Odor	Odorless
Melting point / freezing point	less than -50 °C (< -58 °F)
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No available information
pH	<1
Viscosity (cSt)	No available information
Solubility in Water	Completely Soluble in water.
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapour pressure (Pa)	No available information
Relative Density	No available information
Vapour Density	No available information
Evaporation rate (Ether = 1)	No available information
Specific Gravity	1.50 - 1.62
Density (lbs/US gal)	12.5 - 13.5
Other information	
No other relevant information.	

Section 10. Stability and reactivity**Reactivity**

Hazardous Polymerization will not occur.

Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions

May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

Conditions to avoid

Ferric Sulfate, 60%**Safety Data Sheet**

Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible materials

Strong acids, strong bases, strong oxidizers. Alkalies. Metals.

Hazardous decomposition products

When heated, emits highly toxic and corrosive fumes of hydrogen compounds and hydrogen gas.

Section 11. Toxicological information**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Product Acute Toxicity Estimates	714	2857	NA	NA	NA

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ferric sulfate - (10028-22-5)	500.00, Rat - Category: 4	2,000.00, Rat - Category: 4	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
0010028-22-5	Ferric sulfate	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

Symptoms and effects, both acute and delayed:

Acute Health Effects: Harmful if swallowed. Causes skin irritation and eye damage. May be corrosive to the respiratory tract.

Ferric Sulfate, 60%**Safety Data Sheet**

EYE: Causes permanent damage to the cornea, iris, or conjunctiva. (IMMEDIATE)

SKIN: Causes irritation (IMMEDIATE) which may progress to chemical burns.

INHALATION: May be corrosive to the respiratory tract. (IMMEDIATE)

INGESTION: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract (IMMEDIATE). Harmful if swallowed. Causes severe skin irritation and eye damage.

Indication of Any Immediate Medical Attention and Special Treatment Needed: If exposed or concerned, get medical advice and attention.

Most likely route(s) of exposure Skin, Eyes

Eyes	Causes serious eye damage.
Skin	Causes skin irritation.
Ingestion	Harmful if swallowed.
Chronic effects	Not available, none known.

Section 12. Ecological information**Toxicity**

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ferric sulfate - (10028-22-5)	133.00, Gambusia affinis	12.39, Daphnia longispina	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No available information

Section 13. Disposal considerations**Waste treatment methods**

Dispose of waste material in accordance with all local, regional, federal, provincial, state, territorial and international regulations.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ferric Sulfate, 60%**Safety Data Sheet****Section 14. Transport information**

Classification Method: Classified as per Part 2, Sections 2.1 - 2.8 of the Transportation of Dangerous Goods Regulations.

	DOT / TDG (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	UN3264	UN3264	UN3264
UN proper shipping name	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate), 8, III	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)	Corrosive liquid, acidic, inorganic, n.o.s. (Contains Ferric Sulfate)
Transport hazard class(es)	TDG Hazard Class: 8 Sub Class: Not Applicable	IMDG: 8 Sub Class: Not Applicable	Air Class: 8 Sub Class: Not Applicable
Packing group III		III	III
Environmental hazards	Marine Pollutant: No;		
Special precautions for user	No available information		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

NFPA Ranking

Health (blue) :3

Fire (red) :0

Reactivity (yellow) :0

Special (white) :ACID



This product has been classified in accordance with the hazard criteria Hazardous Products Regulations (SOR/2015-17) and the SDS contains all of the information required by those regulations.

Toxic Substance Control Act (TSCA):

Ferric sulfate (Present)

Water (Present)

EPCRA 311/312 Chemicals and RQs (lbs):

Ferric sulfate (1,000.00)

Canadian Domestic Substance List (DSL):

Ferric sulfate

Water

Ferric Sulfate, 60%**Safety Data Sheet****Canadian Non-Domestic Substance List (NDSL):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Ferric sulfate

Pennsylvania RTK Substances (>1%):

Ferric sulfate

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Chemical Name (CAS Number)	US TSCA	Australia AICS	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Ferric sulfate (0010028-22-5)	Yes	Yes	Yes	Yes	No	No	No	Yes

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Ferric sulfate (0010028-22-5)	Yes	Yes	No	No	No	No	Yes	Yes

Section 16. Other information

Revision Date 10/24/2023

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products.

Ferric Sulfate, 60%**Safety Data Sheet**

Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

Revision Summary

Section :	Modification
2	Updated skin corrosion classification
4	Updated language
11	Updated information

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.





The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, January 17, 2024** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade+&TradeName=FERRIC&PlantState=Illinois+IL&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>)

Facility : East St. Louis, IL

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 60%

Ferric Sulfate Solution

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

600mg/L

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Liquid Ferric Sulfate

Coagulation & Flocculation

600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 4

Processing time was 0 seconds

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=FERRIC&PlantState=Texas+TX&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC (formerly General Chemical LLC)

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Celina, TX

Ferric Sulfate

Trade Designation

Ferric Sulfate 50%

Ferric Sulfate 55%

Product Function

Coagulation & Flocculation

Coagulation & Flocculation

Max Use

600mg/L

600mg/L

Ferric Sulfate 60%	Coagulation & Flocculation	600mg/L
Ferric Sulfate Solution	Coagulation & Flocculation	600mg/L
Liquid Ferric Sulfate	Coagulation & Flocculation	600mg/L

Number of matching Manufacturers is 1

Number of matching Products is 5

Processing time was 0 seconds

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CHEMTRADE CHEMICALS US LLC

Item: **Group 2, Product Details:Group 2, Product Details:Group 2, Product Details:Group 2, Product Details:Group 2, Product Details:Bid price Per lbs. for Totes**

Attachments

Hyperion 3530 - spec sheets.pdf

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Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion [®] :	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.

Elizabeth Ryno
Marketing Specialist

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AWWA multiple products

**CHEMTRADE ANALYTICAL SERVICES LABORATORY**
REPORT OF ANALYSIS

To: OKLAHOMA CITY, OK
cc: Parul Patel

Lab. Log # 30728013530

SAMPLES: Hyper+Ion 3530 - Semi-Annual Audit

ORIGIN: Terrell, TX

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
As	<2	% Al ₂ O ₃ (total by wt)	11.7
Ba	<1	% Chlorides	7.6
Be	<1	% Basicity	81
Ca	25		
Cd	<1		
Co	<1		
Cr	<1		
Cu	<1		
Fe	35		
Hg	<0.5		
K	3		
Mg	3		
Mn	1		
Mo	<1		
Na	4220		
Ni	1		
P	3		
Pb	<1.5		
S	6		
Sb	<1.5		
Se	<1		
Si	27		
Sn	<1		
Sr	<1		
Ti	3		
Tl	<1.5		
V	5		
Zn	1		
Zr	<1		

NOTES:

Product within specification for all parameters analyzed.

Analysts **Record**
Justin Brown
Stephanie Ulman 45139.437

Report Date
PP 02/08/2024

Chemtrade is not engaged in the business of consulting or providing technical, operational or safety advice for a fee. Any such advice provided herein has been furnished as an accommodation and without charge and is made without any warranty of representation as to its completeness, accuracy, fitness for a particular purpose or any other matter. The recipient's use or non-use of such advice is made solely at the discretion and risk of the recipient.

2/8/2024;
3072801 Terrell HI1090

**CHEMTRADE**<http://www.chemtradelogistics.com>

Hyper⁺lon[®] 3530

PRODUCT DATA SHEET

CHARACTERISTICS

Hyper⁺lon[®] 3530 is a colorless to amber colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Polyaluminum hydroxychloride mixture
C.A.S.	1327-41-9 (Polyaluminum hydroxychloride)
pH (neat)	2 - 5
Specific Gravity @ 21°C (70°F)	1.18 - 1.22
Freezing Point (approx.)	-5°C (23°F)
Density, lbs./gal., US	9.8 - 10.2
Aluminum as Al, %	6.1 - 6.6
Aluminum as Al ₂ O ₃ , %	11.5 - 12.5
Basicity, %	80 (min.)

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport	Bulk car	275 US gal. one-way container	55 US gal. plastic drum
----------------	----------	-------------------------------	-------------------------

SHIPPING REGULATIONS (US DOT / TDG)

Classification: Not regulated for transport

RQ: Not applicable

PRODUCT SAFETY INFORMATION

Causes serious eye irritation. Wash hands, forearms, and other exposed areas thoroughly after handling. Wear eye protection, protective clothing, and protective gloves. Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-6295P

Revision Date: May 6, 2020

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**Hyper+Ion® 3530****Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Revision Date: 05/31/2017

Date of Issue: 05/19/2015

Version: 2.0

SECTION 1: IDENTIFICATION**Product Identifier****Product Form:** Mixture**Product Name:** Hyper+Ion® 3530**Intended Use of the Product**

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Name, Address, and Telephone of the Responsible Party**Manufacturer**

CHEMTRADE LOGISTICS INC.

155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5

For SDS Info: (416) 496-5856

www.chemtradelogistics.com**Emergency Telephone Number****Emergency Number :**

Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION**Classification of the Substance or Mixture****GHS Classification**

Eye Irrit. 2A H319

Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

Label Elements**GHS Labeling****Hazard Pictograms**

:



GH507

Signal Word

: Warning

Hazard Statements

: H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements

: P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Name	Product Identifier	%*	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	40 – 70	Not classified
Aluminum chloride, basic	(CAS-No.) 1327-41-9	15 – 40	Eye Irrit. 2A, H319
Quaternary Ammonium Polymer**	(CAS-No.) Proprietary	10 – 30	Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

**The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES**Description of First-aid Measures****General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Call a POISON CENTER or doctor/physician if you feel unwell.**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.**Ingestion:** Rinse mouth. Do NOT induce vomiting.**Most Important Symptoms and Effects Both Acute and Delayed****General:** Causes serious eye irritation.**Inhalation:** May cause irritation to the respiratory tract.**Skin Contact:** May cause skin irritation.**Eye Contact:** Causes serious eye irritation.**Ingestion:** Ingestion is likely to be harmful or have adverse effects.**Chronic Symptoms:** None expected under normal conditions of use.**Indication of Any Immediate Medical Attention and Special Treatment Needed**

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES**Extinguishing Media****Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.**Special Hazards Arising From the Substance or Mixture****Fire Hazard:** Not flammable.**Explosion Hazard:** Product is not explosive.**Reactivity:** Hazardous reactions will not occur under normal conditions.**Advice for Firefighters****Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.**Firefighting Instructions:** Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decomposition.**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.**Hazardous Combustion Products:** Carbon oxides (CO, CO₂).**Reference to Other Sections**

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures****General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.C
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Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Dispose in a safe manner in accordance with local/national regulations. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalies. Alcohols. Amines.

Specific End Use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Consumer Exposure Controls: Do not eat, drink or smoke during use

Other Information: When using, do not eat, drink or smoke.

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Colorless to amber colored
Odor	: Not available
Odor Threshold	: Not available
pH	: 2 - 5
Evaporation Rate	: Not available
Melting Point	: < -1 °C (30.2 °F)
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.10 - 1.35
Solubility	: 100%
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Hydrogen chloride. Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

pH: 2 - 5

Eye Damage/Irritation: Causes serious eye irritation.

pH: 2 - 5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Symptoms/Effects After Inhalation: May cause irritation to the respiratory tract.

Symptoms/Effects After Skin Contact: May cause skin irritation.

Symptoms/Effects After Eye Contact: Causes serious eye irritation.

Symptoms/Effects After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quaternary Ammonium Polymer	
LD50 Oral Rat	3000 mg/kg
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Persistence and Degradability

Hyper+Ion® 3530	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Hyper+Ion® 3530	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transport according to: US DOT, IMDG, IATA, and Canada's TDG

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Quaternary Ammonium Polymer	Not applicable	Not applicable	Not applicable	No
Aluminum chloride, basic (1327-41-9)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Hyper+Ion® 3530
Immediate (acute) health hazard

US TSCA Flags

Chemical Name (CAS No.)	US TSCA Flags/ Other Information
Quaternary Ammonium Polymer	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

US State Regulations

Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quaternary Ammonium Polymer	No	No	No	No
Aluminum chloride, basic (1327-41-9)	No	No	No	No

State Right-To-Know Lists

Quaternary Ammonium Polymer
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No
Aluminum chloride, basic (1327-41-9)
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

Canadian Regulations

Quaternary Ammonium Polymer
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)
Aluminum chloride, basic (1327-41-9)
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Quaternary Ammonium Polymer	Yes	No	Yes	No	No	No	No	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	Yes	Yes	No	No	No	Yes
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSC	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Quaternary Ammonium Polymer	Yes	Yes	No	No	No	Yes	Yes	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	No	No	No	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**Date of Preparation or Latest Revision** : 05/31/2017**Revision Summary**

Section	Change	Date Changed
5	Language modified	05/31/2017
8	Language modified	05/31/2017
10	Language modified	05/31/2017
16	Data modified	05/31/2017

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Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

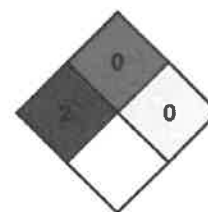
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

NFPA 704

NFPA Health Hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA Fire Hazard : 0 - Materials that will not burn under typical dire conditions.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.

**HMIS Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

PPE See Section 8

Abbreviations and Acronyms

AICS - Australian Inventory of Chemical Substances
ACGIH - American Conference of Governmental Industrial Hygienists
AIHA - American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BEI - Biological Exposure Indices (BEI)
CAS No. - Chemical Abstracts Service number
CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
CICR - Turkish Inventory and Control of Chemicals
DOT - 49 CFR - US Department of Transportation - Code of Federal Regulations Title 49 - Transportation.
EC50 - Median effective concentration
ECL - Korea Existing Chemicals List
EINECS - European Inventory of Existing Commercial Chemical Substances
ELINCS - European List of Notified Chemical Substances
EmS - IMDG Emergency Schedule Fire & Spillage
ENCs - Japanese Existing and New Chemical Substances Inventory
EPA - Environmental Protection Agency
EPCRA 304 RQ - EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act - Reportable Quantity
ERAP Index - Emergency Response Assistance Plan Quantity Limit
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
ERG No. - Emergency Response Guide Number
HCCL - Hazard Communication Carcinogen List
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association - Dangerous Goods Regulations
IDLH - Immediately Dangerous to Life or Health
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China
IMDG - International Maritime Dangerous Goods Code
INSQ - Mexican National Inventory of Chemical Substances
ISHL - Japan Industrial Safety and Health Law

LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-observed-effect Concentration
Log Pow - Octanol/water Partition Coefficient
NFPA 704 - National Fire Protection Association - Standard System for the Identification of the Hazards of Materials for Emergency Response
NIOSH - National Institute for Occupational Safety and Health
NLP - Europe No Longer Polymers List
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NZIOC - New Zealand Inventory of Chemicals
OEL - Occupational Exposure Limits
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limits
PICCS - Philippine Inventory of Chemicals and Chemical Substances
PDSCL - Japan Poisonous and Deleterious Substances Control Law
PPE - Personal Protective Equipment
PRTR - Japan Pollutant Release and Transfer Register
REL - Recommended Exposure Limit
SADT - Self Accelerating Decomposition Temperature
SARA - Superfund Amendments and Reauthorization Act
SARA 302 - Section 302, 40 CFR Part 355
SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
SARA 313 - Section 313, 40 CFR Part 372
SRCL - Specifically Regulated Carcinogen List
STEL - Short Term Exposure Limit
SVHC - European Candidate List of Substance of Very High Concern
TDG - Transport Canada Transport of Dangerous Goods Regulations
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TSCA - United States Toxic Substances Control Act
TWA - Time Weighted Average
WEEL - Workplace Environmental Exposure Levels

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Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade NA GHS SDS 2015

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time.
Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>).

Facility : Decatur, AL

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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**Chemtrade Solutions LLC (formerly
General Chemical LLC)**

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Pittsburg, CA

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : East St. Louis, IL

Polymer Blends

Trade Designation

Hyper+Ion® 3530[AL] [PY]

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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Facility : Terrell, TX

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : Menasha, WI

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Number of matching Manufacturers is 2

Number of matching Products is 5

Processing time was 0 seconds

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Item: Group 2, Product Details:Group 2, Product Details:Group 2, Product Details:Group 2, Product Details:Group 2,
Product Details:Group 2, Product Details:Bid price Per lbs. for 55 Gallon Drum

Hyperion 3530 - spec sheets.pdf

C249051

Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion [®] :	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.


Elizabeth Ryno
Marketing Specialist

AWWA multiple products

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**CHEMTRADE ANALYTICAL SERVICES LABORATORY**
REPORT OF ANALYSIS

To: OKLAHOMA CITY, OK
cc: Parul Patel

Lab. Log # 30728013530

SAMPLES: Hyper+Ion 3530 - Semi-Annual Audit

ORIGIN: Terrell, TX

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
As	<2	% Al ₂ O ₃ (total by wt)	11.7
Ba	<1	% Chlorides	7.6
Be	<1	% Basicity	81
Ca	25		
Cd	<1		
Co	<1		
Cr	<1		
Cu	<1		
Fe	35		
Hg	<0.5		
K	3		
Mg	3		
Mn	1		
Mo	<1		
Na	4220		
Ni	1		
P	3		
Pb	<1.5		
S	6		
Sb	<1.5		
Se	<1		
Si	27		
Sn	<1		
Sr	<1		
Ti	3		
Tl	<1.5		
V	5		
Zn	1		
Zr	<1		

NOTES:

Product within specification for all parameters analyzed.

Analysts **Record**
Justin Brown
Stephanie Ulman 45139.437

Report Date
PP 02/08/2024

Chemtrade is not engaged in the business of consulting or providing technical, operational or safety advice for a fee. Any such advice provided herein has been furnished as an accommodation and without charge and is made without any warranty of representation as to its completeness, accuracy, fitness for a particular purpose or any other matter. The recipient's use or non-use of such advice is made solely at the discretion and risk of the recipient.

2/8/2024;
3072801 Terrell HI1090

**CHEMTRADE**<http://www.chemtradelogistics.com>

Hyper⁺lon[®] 3530

PRODUCT DATA SHEET

CHARACTERISTICS

Hyper⁺lon[®] 3530 is a colorless to amber colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Polyaluminum hydroxychloride mixture
C.A.S.	1327-41-9 (Polyaluminum hydroxychloride)
pH (neat)	2 - 5
Specific Gravity @ 21°C (70°F)	1.18 - 1.22
Freezing Point (approx.)	-5°C (23°F)
Density, lbs./gal., US	9.8 - 10.2
Aluminum as Al, %	6.1 - 6.6
Aluminum as Al ₂ O ₃ , %	11.5 - 12.5
Basicity, %	80 (min.)

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport	Bulk car	275 US gal. one-way container	55 US gal. plastic drum
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SHIPPING REGULATIONS (US DOT / TDG)

Classification: Not regulated for transport

RQ: Not applicable

PRODUCT SAFETY INFORMATION

Causes serious eye irritation. Wash hands, forearms, and other exposed areas thoroughly after handling. Wear eye protection, protective clothing, and protective gloves. Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-6295P

Revision Date: May 6, 2020

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter. Including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.

**Hyper+Ion® 3530****Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Revision Date: 05/31/2017

Date of Issue: 05/19/2015

Version: 2.0

SECTION 1: IDENTIFICATION**Product Identifier****Product Form:** Mixture**Product Name:** Hyper+Ion® 3530**Intended Use of the Product**

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Name, Address, and Telephone of the Responsible Party**Manufacturer**

CHEMTRADE LOGISTICS INC.

155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5

For SDS Info: (416) 496-5856

www.chemtradelogistics.com**Emergency Telephone Number****Emergency Number :**

Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION**Classification of the Substance or Mixture****GHS Classification**

Eye Irrit. 2A H319

Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

Label Elements**GHS Labeling****Hazard Pictograms**

:



GH507

Signal Word

: Warning

Hazard Statements

: H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements

: P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	%*	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	40 – 70	Not classified
Aluminum chloride, basic	(CAS-No.) 1327-41-9	15 – 40	Eye Irrit. 2A, H319
Quaternary Ammonium Polymer**	(CAS-No.) Proprietary	10 – 30	Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

**The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Inhalation: May cause irritation to the respiratory tract.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂).

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Dispose in a safe manner in accordance with local/national regulations. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalies. Alcohols. Amines.

Specific End Use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Consumer Exposure Controls: Do not eat, drink or smoke during use

Other Information: When using, do not eat, drink or smoke.

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Colorless to amber colored
Odor	: Not available
Odor Threshold	: Not available
pH	: 2 - 5
Evaporation Rate	: Not available
Melting Point	: < -1 °C (30.2 °F)
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.10 - 1.35
Solubility	: 100%
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Hydrogen chloride. Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

pH: 2 - 5

Eye Damage/Irritation: Causes serious eye irritation.

pH: 2 - 5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

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Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Symptoms/Effects After Inhalation: May cause irritation to the respiratory tract.

Symptoms/Effects After Skin Contact: May cause skin irritation.

Symptoms/Effects After Eye Contact: Causes serious eye irritation.

Symptoms/Effects After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quaternary Ammonium Polymer	
LD50 Oral Rat	3000 mg/kg
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Persistence and Degradability

Hyper+Ion® 3530	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Hyper+Ion® 3530	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transport according to: US DOT, IMDG, IATA, and Canada's TDG

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Quaternary Ammonium Polymer	Not applicable	Not applicable	Not applicable	No
Aluminum chloride, basic (1327-41-9)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Hyper+Ion® 3530	
Immediate (acute) health hazard	

US TSCA Flags

Chemical Name (CAS No.)	US TSCA Flags/ Other Information
Quaternary Ammonium Polymer	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

US State Regulations

Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quaternary Ammonium Polymer	No	No	No	No
Aluminum chloride, basic (1327-41-9)	No	No	No	No

State Right-To-Know Lists

Quaternary Ammonium Polymer
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No
Aluminum chloride, basic (1327-41-9)
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

Canadian Regulations

Quaternary Ammonium Polymer
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)
Aluminum chloride, basic (1327-41-9)
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Quaternary Ammonium Polymer	Yes	No	Yes	No	No	No	No	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	Yes	Yes	No	No	No	Yes
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSC	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Quaternary Ammonium Polymer	Yes	Yes	No	No	No	Yes	Yes	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	No	No	No	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**Date of Preparation or Latest Revision** : 05/31/2017**Revision Summary**

Section	Change	Date Changed
5	Language modified	05/31/2017
8	Language modified	05/31/2017
10	Language modified	05/31/2017
16	Data modified	05/31/2017

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Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

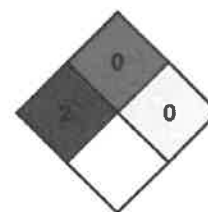
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

NFPA 704

NFPA Health Hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA Fire Hazard : 0 - Materials that will not burn under typical dire conditions.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.

**HMIS Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

PPE See Section 8

Abbreviations and Acronyms

AICS - Australian Inventory of Chemical Substances
ACGIH - American Conference of Governmental Industrial Hygienists
AIHA - American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BEI - Biological Exposure Indices (BEI)
CAS No. - Chemical Abstracts Service number
CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
CICR - Turkish Inventory and Control of Chemicals
DOT - 49 CFR - US Department of Transportation - Code of Federal Regulations Title 49 - Transportation.
EC50 - Median effective concentration
ECL - Korea Existing Chemicals List
EINECS - European Inventory of Existing Commercial Chemical Substances
ELINCS - European List of Notified Chemical Substances
EmS - IMDG Emergency Schedule Fire & Spillage
ENCs - Japanese Existing and New Chemical Substances Inventory
EPA - Environmental Protection Agency
EPCRA 304 RQ - EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act - Reportable Quantity
ERAP Index - Emergency Response Assistance Plan Quantity Limit
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
ERG No. - Emergency Response Guide Number
HCCL - Hazard Communication Carcinogen List
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association - Dangerous Goods Regulations
IDLH - Immediately Dangerous to Life or Health
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China
IMDG - International Maritime Dangerous Goods Code
INSQ - Mexican National Inventory of Chemical Substances
ISHL - Japan Industrial Safety and Health Law

LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-observed-effect Concentration
Log Pow - Octanol/water Partition Coefficient
NFPA 704 - National Fire Protection Association - Standard System for the Identification of the Hazards of Materials for Emergency Response
NIOSH - National Institute for Occupational Safety and Health
NLP - Europe No Longer Polymers List
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NZIOC - New Zealand Inventory of Chemicals
OEL - Occupational Exposure Limits
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limits
PICCS - Philippine Inventory of Chemicals and Chemical Substances
PDSCL - Japan Poisonous and Deleterious Substances Control Law
PPE - Personal Protective Equipment
PRTR - Japan Pollutant Release and Transfer Register
REL - Recommended Exposure Limit
SADT - Self Accelerating Decomposition Temperature
SARA - Superfund Amendments and Reauthorization Act
SARA 302 - Section 302, 40 CFR Part 355
SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
SARA 313 - Section 313, 40 CFR Part 372
SRCL - Specifically Regulated Carcinogen List
STEL - Short Term Exposure Limit
SVHC - European Candidate List of Substance of Very High Concern
TDG - Transport Canada Transport of Dangerous Goods Regulations
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TSCA - United States Toxic Substances Control Act
TWA - Time Weighted Average
WEEL - Workplace Environmental Exposure Levels

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Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade NA GHS SDS 2015

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time.
Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>).

Facility : Decatur, AL

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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**Chemtrade Solutions LLC (formerly
General Chemical LLC)**

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Pittsburg, CA

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : East St. Louis, IL

Polymer Blends

Trade Designation

Hyper+Ion® 3530[AL] [PY]

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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Facility : Terrell, TX

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : Menasha, WI

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Number of matching Manufacturers is 2

Number of matching Products is 5

Processing time was 0 seconds

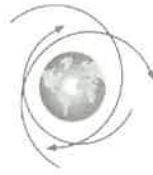
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Hyperion 3530 - spec sheets.pdf

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Water Treatment Group



CHEMTRADE

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

PRODUCT CERTIFICATION

Chemtrade Chemicals US, LLC certifies that all grades of the following products produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA standard as indicated.

Ferric Sulfate:	B406-20
Hyper+Ion [®] :	B408-18

Additionally, we certify that the product meets or exceeds the specifications as set forth in the City of Oklahoma City, OK bid.

Safety Data Sheet, NSF Certification and related technical information is attached for review.

Elizabeth Ryno
Marketing Specialist

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**CHEMTRADE ANALYTICAL SERVICES LABORATORY**
REPORT OF ANALYSIS

To: OKLAHOMA CITY, OK
cc: Parul Patel

Lab. Log # 30728013530

SAMPLES: Hyper+Ion 3530 - Semi-Annual Audit

ORIGIN: Terrell, TX

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
As	<2	% Al ₂ O ₃ (total by wt)	11.7
Ba	<1	% Chlorides	7.6
Be	<1	% Basicity	81
Ca	25		
Cd	<1		
Co	<1		
Cr	<1		
Cu	<1		
Fe	35		
Hg	<0.5		
K	3		
Mg	3		
Mn	1		
Mo	<1		
Na	4220		
Ni	1		
P	3		
Pb	<1.5		
S	6		
Sb	<1.5		
Se	<1		
Si	27		
Sn	<1		
Sr	<1		
Ti	3		
Tl	<1.5		
V	5		
Zn	1		
Zr	<1		

NOTES:

Product within specification for all parameters analyzed.

Analysts **Record**
Justin Brown
Stephanie Ulman 45139.437

Report Date
PP 02/08/2024

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2/8/2024;
3072801 Terrell HI1090

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**CHEMTRADE**<http://www.chemtradelogistics.com>

Hyper⁺lon[®] 3530

PRODUCT DATA SHEET

CHARACTERISTICS

Hyper⁺lon[®] 3530 is a colorless to amber colored liquid. It is an advanced cationic coagulant and flocculant suitable for industrial and municipal water and wastewater treatment applications.

NSF/ANSI/CAN Standard 60: Drinking Water Chemicals - Health Effects; Certified

TYPICAL PROPERTIES

Formula:	Polyaluminum hydroxychloride mixture
C.A.S.	1327-41-9 (Polyaluminum hydroxychloride)
pH (neat)	2 - 5
Specific Gravity @ 21°C (70°F)	1.18 - 1.22
Freezing Point (approx.)	-5°C (23°F)
Density, lbs./gal., US	9.8 - 10.2
Aluminum as Al, %	6.1 - 6.6
Aluminum as Al ₂ O ₃ , %	11.5 - 12.5
Basicity, %	80 (min.)

PRODUCT USES

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SHIPPING CONTAINERS

Bulk transport	Bulk car	275 US gal. one-way container	55 US gal. plastic drum
----------------	----------	-------------------------------	-------------------------

SHIPPING REGULATIONS (US DOT / TDG)

Classification: Not regulated for transport

RQ: Not applicable

PRODUCT SAFETY INFORMATION

Causes serious eye irritation. Wash hands, forearms, and other exposed areas thoroughly after handling. Wear eye protection, protective clothing, and protective gloves. Anyone procuring, using or disposing of these products or their containers must be familiar with the appropriate safety and handling precautions. Such information may be found in the **Safety Data Sheets (SDS)** for these products or you may contact Chemtrade at 416-496-5856. In the event of an emergency with these products, call the 24-hour **Emergency Number: USA and Canada (CHEMTREC) 800-424-9300**. For additional information contact:

Syracuse Technical Center
315-478-2323 or 800-255-7589

Water Treatment Chemicals
Customer Service 844-204-9675

CHE-6295P

Revision Date: May 6, 2020

All information, statements, data, advice and/or recommendations, including, without limitation, those relating to storage, loading/unloading, piping and transportation (collectively referred to herein as "information") are believed to be accurate and reliable. However, no representation or warranty, express or implied, is made as to its completeness, accuracy, fitness for a particular purpose or any other matter. Including, without limitation, that the practice or application of any such information is free of patent infringement or other intellectual property misappropriation. Chemtrade Logistics Inc. and its affiliates (collectively, "Chemtrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein has been furnished as an accommodation and without charge. All information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemtrade shall not be responsible or liable for the use, application or implementation of the information provided herein, and all such information is to be used at the risk, and in the sole judgment and discretion, of such persons, their employees, advisors and agents.

**Hyper+Ion® 3530****Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Revision Date: 05/31/2017

Date of Issue: 05/19/2015

Version: 2.0

SECTION 1: IDENTIFICATION**Product Identifier****Product Form:** Mixture**Product Name:** Hyper+Ion® 3530**Intended Use of the Product**

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

Name, Address, and Telephone of the Responsible Party**Manufacturer**

CHEMTRADE LOGISTICS INC.

155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5

For SDS Info: (416) 496-5856

www.chemtradelogistics.com**Emergency Telephone Number****Emergency Number :**

Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION**Classification of the Substance or Mixture****GHS Classification**

Eye Irrit. 2A H319

Aquatic Chronic 3 H412

Full text of hazard classes and H-statements : see section 16

Label Elements**GHS Labeling****Hazard Pictograms**

:



GH507

Signal Word

: Warning

Hazard Statements

: H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements

: P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

Name	Product Identifier	%*	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	40 – 70	Not classified
Aluminum chloride, basic	(CAS-No.) 1327-41-9	15 – 40	Eye Irrit. 2A, H319
Quaternary Ammonium Polymer**	(CAS-No.) Proprietary	10 – 30	Aquatic Chronic 3, H412

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

**The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES**Description of First-aid Measures****General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Call a POISON CENTER or doctor/physician if you feel unwell.**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.**Ingestion:** Rinse mouth. Do NOT induce vomiting.**Most Important Symptoms and Effects Both Acute and Delayed****General:** Causes serious eye irritation.**Inhalation:** May cause irritation to the respiratory tract.**Skin Contact:** May cause skin irritation.**Eye Contact:** Causes serious eye irritation.**Ingestion:** Ingestion is likely to be harmful or have adverse effects.**Chronic Symptoms:** None expected under normal conditions of use.**Indication of Any Immediate Medical Attention and Special Treatment Needed**

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES**Extinguishing Media****Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.**Special Hazards Arising From the Substance or Mixture****Fire Hazard:** Not flammable.**Explosion Hazard:** Product is not explosive.**Reactivity:** Hazardous reactions will not occur under normal conditions.**Advice for Firefighters****Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.**Firefighting Instructions:** Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decomposition.**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.**Hazardous Combustion Products:** Carbon oxides (CO, CO₂).**Reference to Other Sections**

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures****General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Dispose in a safe manner in accordance with local/national regulations. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalies. Alcohols. Amines.

Specific End Use(s)

Municipal and industrial water and wastewater treatment for the removal of turbidity, color, suspended solids and phosphorus. Sludge compaction and volume reduction. Lagoon treatment. Oily wastewater clarification and dissolved air flotation. Emulsion breaking.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Consumer Exposure Controls: Do not eat, drink or smoke during use

Other Information: When using, do not eat, drink or smoke.

Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Colorless to amber colored
Odor	: Not available
Odor Threshold	: Not available
pH	: 2 - 5
Evaporation Rate	: Not available
Melting Point	: < -1 °C (30.2 °F)
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: Not available
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.10 - 1.35
Solubility	: 100%
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures. Incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers. Metals. Alkalis. Alcohols. Amines.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Hydrogen chloride. Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

pH: 2 - 5

Eye Damage/Irritation: Causes serious eye irritation.

pH: 2 - 5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

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Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Symptoms/Effects After Inhalation: May cause irritation to the respiratory tract.

Symptoms/Effects After Skin Contact: May cause skin irritation.

Symptoms/Effects After Eye Contact: Causes serious eye irritation.

Symptoms/Effects After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quaternary Ammonium Polymer	
LD50 Oral Rat	3000 mg/kg
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Aluminum chloride, basic (1327-41-9)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Persistence and Degradability

Hyper+Ion® 3530	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Hyper+Ion® 3530	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transport according to: US DOT, IMDG, IATA, and Canada's TDG

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Quaternary Ammonium Polymer	Not applicable	Not applicable	Not applicable	No
Aluminum chloride, basic (1327-41-9)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Hyper+Ion® 3530	
Immediate (acute) health hazard	

US TSCA Flags

Chemical Name (CAS No.)	US TSCA Flags/ Other Information
Quaternary Ammonium Polymer	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

US State Regulations

Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quaternary Ammonium Polymer	No	No	No	No
Aluminum chloride, basic (1327-41-9)	No	No	No	No

State Right-To-Know Lists

Quaternary Ammonium Polymer
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No
Aluminum chloride, basic (1327-41-9)
U.S. - Massachusetts - Right To Know List - No
U.S. - New Jersey - Right to Know Hazardous Substance List - No
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - No

Canadian Regulations

Quaternary Ammonium Polymer
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)
Aluminum chloride, basic (1327-41-9)
Listed on the Canadian DSL (Domestic Substances List)
Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Quaternary Ammonium Polymer	Yes	No	Yes	No	No	No	No	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	Yes	Yes	No	No	No	Yes
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSC	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Quaternary Ammonium Polymer	Yes	Yes	No	No	No	Yes	Yes	Yes
Aluminum chloride, basic (1327-41-9)	Yes	Yes	No	No	No	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**Date of Preparation or Latest Revision** : 05/31/2017**Revision Summary**

Section	Change	Date Changed
5	Language modified	05/31/2017
8	Language modified	05/31/2017
10	Language modified	05/31/2017
16	Data modified	05/31/2017

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Hyper+Ion® 3530

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

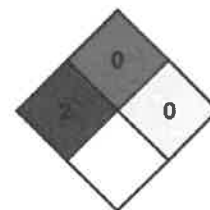
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

NFPA 704

NFPA Health Hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA Fire Hazard : 0 - Materials that will not burn under typical dire conditions.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

PPE See Section 8

Abbreviations and Acronyms

AICS - Australian Inventory of Chemical Substances
ACGIH - American Conference of Governmental Industrial Hygienists
AIHA - American Industrial Hygiene Association
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
BEI - Biological Exposure Indices (BEI)
CAS No. - Chemical Abstracts Service number
CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
CICR - Turkish Inventory and Control of Chemicals
DOT - 49 CFR - US Department of Transportation - Code of Federal Regulations Title 49 - Transportation.
EC50 - Median effective concentration
ECL - Korea Existing Chemicals List
EINECS - European Inventory of Existing Commercial Chemical Substances
ELINCS - European List of Notified Chemical Substances
EmS - IMDG Emergency Schedule Fire & Spillage
ENCs - Japanese Existing and New Chemical Substances Inventory
EPA - Environmental Protection Agency
EPCRA 304 RQ - EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act - Reportable Quantity
ERAP Index - Emergency Response Assistance Plan Quantity Limit
ErC50 - EC50 in Terms of Reduction Growth Rate
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)
ERG No. - Emergency Response Guide Number
HCCL - Hazard Communication Carcinogen List
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association - Dangerous Goods Regulations
IDLH - Immediately Dangerous to Life or Health
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China
IMDG - International Maritime Dangerous Goods Code
INSQ - Mexican National Inventory of Chemical Substances
ISHL - Japan Industrial Safety and Health Law

LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-observed-effect Concentration
Log Pow - Octanol/water Partition Coefficient
NFPA 704 - National Fire Protection Association - Standard System for the Identification of the Hazards of Materials for Emergency Response
NIOSH - National Institute for Occupational Safety and Health
NLP - Europe No Longer Polymers List
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NZIOC - New Zealand Inventory of Chemicals
OEL - Occupational Exposure Limits
OSHA - Occupational Safety and Health Administration
PEL - Permissible Exposure Limits
PICCS - Philippine Inventory of Chemicals and Chemical Substances
PDSCL - Japan Poisonous and Deleterious Substances Control Law
PPE - Personal Protective Equipment
PRTR - Japan Pollutant Release and Transfer Register
REL - Recommended Exposure Limit
SADT - Self Accelerating Decomposition Temperature
SARA - Superfund Amendments and Reauthorization Act
SARA 302 - Section 302, 40 CFR Part 355
SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
SARA 313 - Section 313, 40 CFR Part 372
SRCL - Specifically Regulated Carcinogen List
STEL - Short Term Exposure Limit
SVHC - European Candidate List of Substance of Very High Concern
TDG - Transport Canada Transport of Dangerous Goods Regulations
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPQ - Threshold Planning Quantity
TSCA - United States Toxic Substances Control Act
TWA - Time Weighted Average
WEEL - Workplace Environmental Exposure Levels

Hyper+Ion® 3530**Safety Data Sheet**

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



Chemtrade NA GHS SDS 2015

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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Tuesday, February 27, 2024** at 12:15 a.m. Eastern Time.
Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Chemtrade&TradeName=3530&PlantCountry=UNITED+STATES&)

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Chemtrade Solutions LLC

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

Visit this company's website

(<http://www.chemtradelogistics.com>).

Facility : Decatur, AL

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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**Chemtrade Solutions LLC (formerly
General Chemical LLC)**

155 Gordon Baker Road

Suite 300

Toronto, ON M2H 3N5

Canada

866-887-8805

416-496-5856

[Visit this company's website](#)

<http://www.chemtradelogistics.com>

Facility : Pittsburg, CA

Polymer Blends[AL] [PY]

Trade Designation

Hyper+Ion® 3530

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : East St. Louis, IL

Polymer Blends

Trade Designation

Hyper+Ion® 3530[AL] [PY]

Product Function

Coagulation & Flocculation

Max Use

71 mg/L

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

[PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

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Facility : Terrell, TX

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71mg/L

- [AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.
- [PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Facility : Menasha, WI

Polymer Blends[AL] [PY]

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Hyper+Ion® 3530	Coagulation & Flocculation	71 mg/L

- [AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.
- [PY] Polyamines Certified by NSF International comply with 40 CFR 141.111 requirements for percent monomer and dose.

Number of matching Manufacturers is 2

Number of matching Products is 5

Processing time was 0 seconds

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CHEMTRADE CHEMICALS US LLC

Item: **Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Group 4, Delivery:Delivery Standard - Monday through Friday**

Attachments

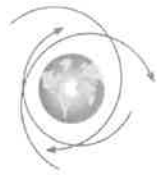
Delivery Times.pdf

Cust Serv Contact.pdf

Misc Info.pdf

Addendum 1.pdf

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CHEMTRADE

Water Treatment Group

90 East Halsey Road
Parsippany, NJ 07054
Tel: 1-800-441-2653
Fax: (973) 515-4461
www.chemtradelogistics.com

The City of Oklahoma City, OK
Bid: OCWUT 19-24 Coagulants and Aids for Water Treatment
Bid Opening: February 28, 2024 @ 10:00 a.m.

DELIVERY TIMES

Please note the approximate delivery times for each product that Chemtrade Chemicals has placed a bid.

Ferric Sulfate

2 – 4 Days After Receipt of Order

Hyper+ion 3530

5 – 7 Days After Receipt of Order

If you have any questions or concerns, please feel free to contact me.

Sincerely,

Elizabeth Ryno

Marketing Specialist

Phone: 973-515-1858

bids@chemtradelogistics.com

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Water Chemicals Group
90 East Halsey Road
Parsippany, NJ 07054
Tel: 973-515-0900
Fax: 973-515-4461

ORDER CONTACT, EMERGENCY CONTACT AND TECHNICAL SERVICE INFORMATION

Normal operating business hours are Monday – Friday 8:00 AM to 5:00 PM E.S.T.

To place orders, contact your Customer Service Representative:

Jackie Prosser
Phone : 1-844-204-9675
E-mail: cssorders@chemtradelogistics.com
Fax: (647) 255-3655

***After normal business hours, for emergencies and orders please call
1-647-531-9709 and the on-call Customer Service Representative will be
available to assist you. This number will also be provided if you call the regular
Customer Service line.***

**For Technical Service please call (315) 478-2323 or visit our website at:
<http://www.chemtradelogistics.com>**

Corporate/Sales Office

Chemtrade Chemicals US LLC.
90 East Halsey Road
Parsippany, NJ 07054

Paul Peters, Business Manager
Phone: (256) 318-4452
Email:
Ppeters@chemtradelogistics.com

Robert Naranjo, Sales Acct Manger
Phone: 360) 440-0293
Email:
rnaranjo@chemtradelogistics.com

Michele Schroeder, Business Manager
Phone: (973) 515-1841
Email:
mschroeder@chemtradelogistics.com

For Bid/Contract Information:

Elizabeth Ryno
Phone: (800) 441-2659
Direct: (973) 515-1858
Fax: 973-515-4461
bryno@chemtradelogistics.com
BIDS@chemtradelogistics.com

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CHEMTRADE

Water Chemicals Group

90 East Halsey Road
Parsippany, NJ 07054
Tel: 800-441-2659
Fax: 973-515-4461
www.ChemtradeLogistics.com

WARRANTY INFORMATION

Chemtrade Chemicals will accept return of material and replace material. Samples will be taken of material and analyzed. Any material that is off-spec as a result of a Chemtrade's production error will be replaced without cost to customer. If product damage is a result of transporation, we will then partner with our carrier to pursue the cause of the problem and develop a resolution in the best interest of the customer.

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CHEMTRADE

Water Chemicals Group
90 East Halsey Road
Parsippany, NJ 07054
Tel: 973-515-0900
Fax: 973-515-4461

**ORDER CONTACT, EMERGENCY CONTACT AND TECHNICAL
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Michele Schroeder, Business Manager
Phone: (973) 515-1841
Email:
mschroeder@chemtradelogistics.com

For Bid/Contract Information:

Elizabeth Ryno
Phone: (800) 441-2659
Direct: (973) 515-1858
Fax: 973-515-4461
bryno@chemtradelogistics.com
BIDS@chemtradelogistics.com

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**OCWUT 19-24 COAGULANTS AND AIDS FOR WATER TREATMENT
PLANTS****ADDENDUM NO. 1**

Issued: February 5, 2024

To: PROSPECTIVE BIDDERS

From: Mark Keesee, Administrative Specialist Through: Chris Browning, General Manager 

Department: Utilities Department

The above referenced bid was advertised in the Journal Record and released online through Periscope on January 17, 2024.

The City has determined a need to issue an addendum to OCWUT 19-24 to add the following:

In Section **Specific Delivery Requirements** pages 13-14: Bulk Chlorine is listed in two (2) areas of the paragraph and should be listed as Coagulants and Aids.

In Section **Notice of Nonconformance** page 17: Carbon Dioxide was listed in five (5) areas of the paragraph and should have been listed as Coagulants and Aids.

In line items:

We are wanting pricing for the 55 Gallon Drums, Totes and Bulk Quantity.

1) Group 1, Product Details: Remove Bid Price Per lbs. for Ferric Sulfate Liquid

Bid Price Per lbs.	AWWA-B 406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.	OCWUT 19-24-01-03
---------------------------	---	-------------------


2) Group 2, Product Details: Remove Bid Price Per lbs. for Polymer/Polymer Blends

Bid Price Per lbs.	Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.	OCWUT 19-24-03-01
---------------------------	--	-------------------

3) Group 3, Product Details: Remove Bid Price Per lbs. for Polymer/Polymer Blends

Bid Price Per lbs.	Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.	OCWUT 19-24-03-01
---------------------------	--	-------------------

APPROVED


Chris Browning, General ManagerC
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Solicitation OCWUT 19-24

Coagulants and Aids for Water Treatment Plants

Bid Designation: Public



The City of
OKLAHOMA CITY

City of Oklahoma City and its Trusts

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Bid OCWUT 19-24
Coagulants and Aids for Water Treatment Plants

Bid Number	OCWUT 19-24
Bid Title	Coagulants and Aids for Water Treatment Plants
Bid Start Date	Jan 17, 2024 8:22:35 AM CST
Bid End Date	Feb 28, 2024 10:00:00 AM CST
Question & Answer End Date	Feb 19, 2024 5:00:00 PM CST
Bid Contact	Mark Keesee 405-297-2765 mark.keesee@okc.gov
Bid Contact	City Clerk 405-297-2391 cityclerk@okc.gov
Bid Contact	Rebecca Cavnar 405-297-1525 rebecca.cavnar@okc.gov
Bid Contact	Stephen Krausnick 405-297-2746 stephen.krausnick@okc.gov
Contract Duration	3 years
Contract Renewal	1 annual renewal
Prices Good for	30 days
Standard Disclaimer	This site and system is hosted by Oklahoma City through BIDSYNC for use of The City of Oklahoma City and its trusts. Certain screens and flags may show the name and/or seal of The City; however, such references do not indicate or change the contracting entity.
Bid Comments	The City of Oklahoma City is accepting bids for Coagulants and Aids for Water Treatment Plants.

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Addendum # 1

New Documents	OCWUT 19-24 Addendum 1.pdf
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Item **OCWUT 19-24--01-01 - Group 1, Product Details: Manufacturers ANSI/NSF 60 Certification**
Lot Description **Group 1, Product Details**
Quantity **1 each**
Prices are not requested for this item.
Delivery Location **City of Oklahoma City and its Trusts**
[See Bid Packet for Location\(s\)](#)
N/A
Oklahoma City OK 73102
Qty 1

Description
Please enter Yes or No in the Buyer Note field

Item **OCWUT 19-24--01-02 - Group 1, Product Details: Distributors ANSI/NSF 60 Certification**
Lot Description **Group 1, Product Details**
Quantity **1 each**
Prices are not requested for this item.
Delivery Location **City of Oklahoma City and its Trusts**
[See Bid Packet for Location\(s\)](#)
N/A
Oklahoma City OK 73102
Qty 1

Description
Please enter Yes or No in the Buyer Note field

Item **OCWUT 19-24--01-03 - Group 1, Product Details: Bid Price Per lbs.**
Lot Description **Group 1, Product Details**
Quantity **1 pound**
Unit Price
Delivery Location **City of Oklahoma City and its Trusts**
[See Bid Packet for Location\(s\)](#)
N/A
Oklahoma City OK 73102
Qty 1

Description
AWWA B-406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.

Item **OCWUT 19-24--01-04 - Group 1, Product Details: Bid price Per lbs. for 55 Gallon Drum**
Lot Description **Group 1, Product Details**
Quantity **1 pound**
Unit Price
Delivery Location **City of Oklahoma City and its Trusts**
[See Bid Packet for Location\(s\)](#)
N/A
Oklahoma City OK 73102
Qty 1

Description

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AWWA B-406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--01-05 - Group 1, Product Details: Bid price Per lbs. for Totes
Lot Description	Group 1, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

AWWA B-406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--02-01 - Group 1 Product Details: Bid price Per lbs. for Bulk Quantity
Lot Description	Group 1 Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

AWWA B-406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--03-01 - Group 2, Product Details: Bid Price Per lbs.
Lot Description	Group 2, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--03-02 - Group 2, Product Details: Bid price Per lbs. for 55 Gallon Drum
Lot Description	Group 2, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A

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Oklahoma City OK 73102
Qty 1

Description

Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--03-03 - Group 2, Product Details: Bid price Per lbs. for Totes
Lot Description	Group 2, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--03-04 - Group 2, Product Details: Bid price Per lbs. for Bulk Quantity
Lot Description	Group 2, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

Polymers/Polymer Blends. Estimated monthly consumption 100,000 lbs. Enter price per lbs.

Item	OCWUT 19-24--04-01 - Group 3, Product Details: Bid Price Per lbs.
Lot Description	Group 3, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description

Sludge Coagulant and Aids. Estimated monthly consumption unknown various. Enter price per lbs.

Item	OCWUT 19-24--04-02 - Group 3, Product Details: Bid price Per lbs. for 55 Gallon Drum
Lot Description	Group 3, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>

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Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description
Sludge Coagulant and Aids. Estimated monthly consumption unknown various. Enter price per lbs.

Item	OCWUT 19-24--04-03 - Group 3, Product Details: Bid price Per lbs. for Totes
Lot Description	Group 3, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description
Sludge Coagulant and Aids. Estimated monthly consumption unknown various. Enter price per lbs.

Item	OCWUT 19-24--04-04 - Group 3, Product Details: Bid price Per lbs. for Bulk Quantity
Lot Description	Group 3, Product Details
Quantity	1 pound
Unit Price	<input type="text"/>
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description
Sludge Coagulant and Aids. Estimated monthly consumption unknown various. Enter price per lbs.

Item	OCWUT 19-24--05-01 - Group 4, Delivery: Delivery Standard - Monday through Friday
Lot Description	Group 4, Delivery
Quantity	1 day
Prices are not requested for this item.	
Delivery Location	City of Oklahoma City and its Trusts
	See Bid Packet for Location(s)
	N/A
	Oklahoma City OK 73102
	Qty 1

Description
Enter number of days for standard delivery after receipt of purchase order, Monday through Friday in the Buyer Note field.

Item	OCWUT 19-24--05-02 - Group 4, Delivery: Delivery Peak Season
Lot Description	Group 4, Delivery

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Quantity **1 day**

Prices are not requested for this item.

Delivery Location **City of Oklahoma City and its Trusts**

[See Bid Packet for Location\(s\)](#)

N/A

Oklahoma City OK 73102

Qty 1

Description

Enter number of days for delivery during peak season after receipt of purchase order, Monday through Friday in the Buyer Note field.

Item **OCWUT 19-24-05-03 - Group 4, Delivery: Delivery Emergency**

Lot Description **Group 4, Delivery**

Quantity **1 day**

Prices are not requested for this item.

Delivery Location **City of Oklahoma City and its Trusts**

[See Bid Packet for Location\(s\)](#)

N/A

Oklahoma City OK 73102

Qty 1

Description

Enter number of days for delivery for emergency events upon receipt of purchase order in the Buyer Note field.

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2024

Mark Keesee
Administrative Specialist
The City of Oklahoma City
Utilities Department
Mark.Keesee@okc.gov

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OCWUT 19-24
Coagulants and Aids for Water Treatment Plants

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Table of Contents

NOTICE TO BIDDERS	4
GENERAL INSTRUCTIONS AND REQUIREMENTS FOR BIDDERS.....	5
OKLAHOMA OPEN RECORDS ACT AND CONFIDENTIAL INFORMATION	8
INTENT OF CONTRACT.....	9
CONTRACTING ENTITY	9
SCOPE OF PRICING AGREEMENT/CONTRACT	9
BID/PRICING AGREEMENT/CONTRACT PERIOD	9
BID/PRICING AGREEMENT/CONTRACT RENEWAL OPTION	10
ORDER OF PRECEDENCE	10
CONTRACT RENEWAL OPTION	10
COST ADJUSTMENT TERMS.....	10
ESTIMATED ANNUAL REQUIREMENTS (NO GUARANTEE)	11
DELIVERY SCHEDULE	12
SAFETY DATA SHEETS.....	14
PAYMENT METHODS.....	15
PAYMENT/INVOICE.....	15
INSURANCE REQUIREMENT	16
LIQUIDATED DAMAGES	17
NOTICE OF NONCONFORMANCE.....	17
WARRANTY.....	17
RIGHT TO ACCEPT OR REJECT AND WAIVING OF FORMALITIES.....	18
WHOLE AGREEMENT	18
INDEPENDENT CONTRACTOR.....	18
INDEMNIFICATION	18
CLARIFICATION.....	19
UNDUE INFLUENCE.....	19
GENERAL PROVISIONS.....	20

C
2
4
9
0
5
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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

BID AWARD.....20

TECHNICAL SPECIFICATIONS21

LETTER OF AUTHORIZATION.....24

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

(Published in the Journal Record on January 17, 2024, and January 24, 2024)

NOTICE TO BIDDERS

Notice is hereby given that Oklahoma City Water Utilities Trust (“Contracting Entity”) will receive electronic bids at the **OFFICE OF THE CITY CLERK, 200 North Walker Avenue, Oklahoma City, Oklahoma 73102** until 10:00:00 a.m., on the 28th day of February 2024, for the following:

Bid Number: **OCWUT 19-24** Title: **Coagulants and Aids for Water Treatment Plants**

The Contracting Entity has partnered with Periscope (formerly BidSync) to accept bids electronically. You are invited to submit a bid electronically through the Periscope system to supply the goods and/or services specified in the electronic bid packet. The Contracting Entity does not provide access to a computer for electronic bidding or electronic bid submission. Bidders must register in advance with Periscope at <https://prod.bidsync.com/the-city-of-oklahoma-city> in order to submit an electronic bid. The Contracting Entity recommends potential Bidders register and become familiar with the Periscope electronic bidding process in advance of submitting a bid. There is no charge to the Bidder for registering or submitting an electronic bid to the Contracting Entity through Periscope. Instructions on how to get registered to bid through Periscope can be found on The City of Oklahoma City’s website at <https://www.okc.gov/departments/bidding>.

Bids shall be made in accordance with this Notice to Bidder, General Instructions and Requirements for Bidders, Oklahoma Open Records Act and Confidential Information, the Specifications, the Agreement & Non-Discrimination Statement, the Non-Collusion Affidavit, and any other documents which are included in the complete electronic bid packet. The Agreement must be completed, signed, and submitted electronically through Periscope for the bid to be valid.

Bids timely submitted electronically through Periscope shall be opened at the time stated above or later in the City Clerk’s Conference Room, located on the 2nd floor of the Municipal Building. The Periscope system does not allow bids to be submitted after the above stated date and time. There will be no exceptions to this policy. All bids shall remain on file at least 48 hours before an Agreement shall be made and entered.

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

GENERAL INSTRUCTIONS AND REQUIREMENTS FOR BIDDERS

THESE INSTRUCTIONS, REQUIREMENTS AND ANY SPECIAL INSTRUCTIONS CONTAINED IN THE SPECIFICATIONS ARE A PART OF THE TERMS AND CONDITIONS OF THE BIDDER'S IRREVOCABLE BID AS A FIRM OFFER. ANY EXCEPTIONS TO THESE INSTRUCTIONS, REQUIREMENTS OR SPECIFICATIONS MUST BE SPECIFIED AND SUBMITTED WITH THE BIDDER'S BID. THIS CAN BE ACCOMPLISHED BY SUBMITTING AN ALTERNATE OFFER, IF AVAILABLE ON THE BID, OR BY ENTERING INFORMATION INTO THE "NOTE TO BUYER" FIELD. A BIDDER MAY ALSO SUBMIT EXCEPTIONS BY UPLOADING A SEPARATE DOCUMENT LABELED "EXCEPTIONS" INTO THE PERISCOPE SYSTEM. FAILURE TO INDICATE ANY EXCEPTIONS WILL BE REGARDED AS FULL ACCEPTANCE OF THE REQUIREMENTS, INSTRUCTIONS, AND SPECIFICATIONS CONTAINED IN THIS BID PACKET AND ANY OTHER BID DOCUMENTS RELATED TO THIS BID.

1. **EXAMINATION BY BIDDERS:** All Bidders must examine the specifications, drawings, schedules, special instructions and these general instructions and requirements prior to electronically submitting any Bid/Pricing Agreement/Contract. Failure to examine is at the Bidder's own risk as Bidder will be held to the terms, conditions and requirements therein.
2. **SUBMISSION OF FORMS REQUIRED FOR PRICING AGREEMENT/CONTRACT AWARD:** All bids must be completed electronically, on the forms provided by the Contracting Entity through the electronic bidding system. Bids will not be considered unless the Bid/Pricing Agreement/Contract form is completed, signed and submitted by the Bidder in the electronic bidding system. A Letter of Authorization should also be attached and submitted when the Bidder is not authorized by statute and the Bidder's organizational and establishing documents to sign and bind the Bidder to the Bid/Pricing Agreement/Contract documents. The Anti/Non-Collusion Affidavit must be executed by the Bidder or an authorized agent and notarized. The notarization must contain:
 - (a) The notary's signature (electronic signature);
 - (b) Jurisdiction where notarization took place (i.e., State of __, County of __);
 - (c) Date of notarization;
 - (d) The notary's commission expiration date;
 - (e) The notary's commission number (Oklahoma);
 - (f) The notarial seal (the notary seal is not required for electronic notarization); and
 - (g) Comply with all other applicable laws. The anti/non-collusion affidavit must be submitted electronically with the electronic bid packet.
3. **SUBMISSION OF BIDS ELECTRONICALLY TO THE CITY CLERK/SECRETARY:** Bids must be submitted electronically through Periscope and shall be opened at the time stated in the Notice to Bidders, or later, in the City Clerk's Conference Room, located on the 2nd floor of the Municipal Building. The Periscope system does not allow bids to be submitted after the deadline. There will be no exceptions to this policy. All bids shall remain on file at least 48 hours thereafter before a Pricing Agreement/Contract shall be made and entered into thereon.
4. **DESCRIPTIVE TERMS:** Unless the term "no substitute" is used, the use of brand name, manufacturer, make, or catalog designation in describing an item does not restrict Bidders to that particular brand name, etc. The term is simply to indicate the type, character, quality and/or performance equivalence of the item desired. However, the proposed substitution item must be of such character, quality and/or performance equivalence as indicated in the specifications. A proposed substitute item must include complete data as to the manufacturer's name, type, model number, any descriptive bulletins and specifications. This data can be uploaded electronically through the electronic bidding system.
5. **EXCEPTIONS:** Any exceptions or variances to these instructions or specifications must be submitted with the Bidder's bid. This can be accomplished by submitting an alternate offer, if available on the bid, or by entering information in the "Note to Buyer" field. A Bidder may also submit exceptions by uploading a separate document labeled "Exceptions" into the Periscope system. Failure to indicate any exceptions will be construed to mean that the Bidder offers to furnish the exact commodity as described in the bid specifications and as full acceptance of the requirements, instructions, and specifications contained in this bid packet and any other bid documents related to this bid.
6. **UNIT PRICES:** A unit price for each unit bid must be shown and include any applicable taxes, delivery, and packaging and/or packing, if any, unless otherwise specified. If there is an estimated quantity stated as such in the specifications, the estimate is not a guarantee of the quantity which may be purchased. When the quantity in the Periscope system is listed as "1", Bidder shall bid the per individual unit price. The Contracting Entity may purchase one or more bid items at any given time throughout the term of the Bid/Pricing Agreement/Contract. The Periscope system will calculate the total based on the quantity requested by the Contracting Entity and the price entered by the Bidder. The Periscope

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

system will calculate the bid price based on the quantity and price. Items bid as an estimated quantity will be awarded on a "no guarantee" basis. Prices shall be extended in decimals, not fractions, and shall include transportation and delivery charges, prepaid by the Bidder to the destination specified in the special instructions of the specifications.

7. **EXEMPTIONS FROM CERTAIN TAXES:** The purchase of certain goods or services by the Contracting Entity is exempt from the payment of excise, transportation, use, and sales tax imposed by the federal, state and/or city governments. Such taxes must not be included in the bid prices. Any taxes that are not exempt must be included in the bid price. No additional payment or compensation will be made for taxes.
8. **PAYMENTS AND DISCOUNTS:**
 - (a) Payment for goods and services as specified in the Bid/Pricing Agreement/Contract shall be processed promptly after completion of delivery and acceptance of items and after receipt from Bidder of properly prepared invoice(s) and/or notarized claim voucher(s), if applicable. Purchases may be made by certain City or Trust employees using a purchasing card. Employees of Contracting Entity are required, when possible, to use a purchasing card for purchases under the amount of \$5,000 for a single transaction. For single transactions over \$5,000, the Bidder may request payment be completed by issuance of a purchase order. Processing fees may not be added when a purchasing card is used. The bid price shall cover any fees a bidder may incur.
 - (b) Discounts for prompt payment will not be considered in bid evaluations, unless otherwise specified. Discounts offered by the Bidder will be taken, however, if payment is made within the discount period.
 - (c) Late charges cannot be assessed against Contracting Entity.
9. **LATE INVOICES:** If the purchase order indicates that the purchase is being made with City funds, all unpaid invoices pertaining to this Pricing Agreement/Contract must be recorded in the Finance Department, Accounts Payable Section, or in the Office of the City Clerk on or before September 30 for all debts incurred during the prior fiscal year (July 1 through June 30) or said invoice shall be void and forever barred. (See 62 Okla. Stat. 2010 § 310.4).
10. **DELIVERY:**
 - (a) All bid prices quoted shall be based on delivery F.O.B. Oklahoma City, Oklahoma or to any points located within the municipal corporate limits (unless otherwise stated in the bid specifications) with all charges prepaid to the actual point of delivery.
 - (b) Bids must show the number of days required for delivery under normal conditions. Unrealistically short or long delivery promises may cause bids to be rejected. A successful Bidder is required to keep the purchasing department advised at all times of the status of the order and delivery. All goods or services shall be delivered within thirty (30) days from the date of the award of the Bid/Pricing Agreement/Contract, unless specified otherwise.
11. **AWARD OF PRICING AGREEMENT/CONTRACTS:** The Contracting Entity reserves the rights to: award by item, groups of items or all items of the bid; to reject any or all bids in whole or in part; and, waive technical defects, irregularities and/or omissions.
12. **PERFORMANCE BONDS:** If required by the specifications, the successful Bidder must post the performance bond, a certified or cashier's check in the amount required prior to award of Bid/Pricing Agreement/Contract.
13. **PATENTS:** The Bidder agrees to indemnify and save harmless the Contracting Entity, including any of Contracting Entity's employees, the purchasing agent and assistants from all suits and actions of every nature and description brought against the Bidder and/or any assistants because of, or for the use of, patented or licensed appliances, products, or processes. The Bidder shall pay all royalties and charges which are legal, and equitable evidence of such payment or satisfaction shall be submitted upon request of the Contracting Entity, as a necessary requirement in connection with the final execution of any Bid/Pricing Agreement/Contract in which patented or licensed appliances, products, or processes are to be used.
14. **TERMINATION:**
 - (a) The performance of services and/or the delivery of items under any Bid/Pricing Agreement/Contract may be terminated by the Contracting Entity, in whole or in part, whenever it is determined to be in the best interest of the Contracting Entity.
 - (b) Any such termination will be affected by delivery to the Bidder of a termination notice specifying the extent to which performance or services and/or delivery of ordered commodities is terminated, and the date the termination becomes effective.
 - (c) After receipt of a termination notice, the Bidder shall stop performance of services and/or accept no further orders under the Pricing Agreement/Contract.
15. **COMPLIANCE WITH APPLICABLE LAWS:** All Bidders must comply with all applicable federal, state or local laws and regulations, including Title VI and all provisions of the Civil Rights Act of 1964 42, U.S.C. §§ 2000d, -et seq.
16. **SELF-INSURED:** The Contracting Entity is self-insured for its own negligence. The liability of the Contracting Entity for acts of negligence are limited and subject to the Governmental Tort Claims Act, 51 O.S. §§ 151, *et seq.*

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

17. **RIGHT TO AUDIT:** The Contracting Entity shall at all times have the right to examine books, papers and records of the successful Bidder relative to all aspects of the Bid/Pricing Agreements/Contracts awarded as a result of this bid to confirm Bid/Pricing Agreement/Contract compliance. Failure to provide the requested information may result in termination of the Bid/Pricing Agreement/Contract. This right to audit only affects Bid/Pricing Agreement/Contract compliance as a result of this bid and does not apply to Bidder records beyond the scope of the Bid/Pricing Agreement/Contract.
18. **REFERENCES:** The Contracting Entity has the right to request references from Bidders.
19. **BID EVALUATION:** Bids will be evaluated based upon the lowest overall cost to the Contracting Entity and a Bidder's responsiveness to the requirements of the specifications. The Contracting Entity retains the right to waive minor deficiencies of specifications, technicalities, or informalities in a bid, provided that the best interest of the Contracting Entity would be served without prejudice to the rights of other Bidders.

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

OKLAHOMA OPEN RECORDS ACT AND CONFIDENTIAL INFORMATION

All materials submitted to The City of Oklahoma City or its Trusts pursuant to this Bid or Proposal potentially become subject to the mandates of the Oklahoma Open Records Act, 51 Okla. Stat. §§ 24A.1. *et seq.* The purpose of this Act is to ensure and facilitate the public's right of access to and review of government records so they may efficiently and intelligently exercise their inherent political power. Almost all "records," as that term is defined in the Act, may be disclosed to the public upon request. Except where specific state or federal statutes create a specific and express exemption or confidential privilege, persons who submit information to public bodies have no right to keep this information from public access nor have a reasonable expectation that this information will be kept from public access.

If you believe that any of the information you have submitted to The City or its Trusts pursuant to this Bid or Proposal is exempt or confidential under a specific state or federal statute, and therefore not subject to public access under the Oklahoma Open Records Act, you must comply with the following:

1. Place said documents/records in a separate electronic file attachment marked "Confidential". DO NOT label your entire Bid or Proposal as "Confidential" – label only those portions of the Bid or Proposal that you feel are exempt or are made confidential by state or federal law as "Confidential".
2. For each such document for which you are claiming an exemption or a confidential privilege, identify the federal and/or state law that creates said privilege, e.g., for trade secrets, *see* 21 O.S. § 1732 (Larceny of Trade Secrets) and the Uniform Trade Secrets Act, 78 O.S. §§ 85, *et seq.*

Should an Open Records request be presented to The City or its Trusts requesting information you have identified as "Confidential," you will be responsible for defending your position in the District Court, if needed.

If you fail to identify any records submitted as part of your Bid or Proposal as "Confidential", you are agreeing that said records are not exempt or confidential and are subject to public access. Upon receipt of a request by a third party to review or copy records properly identified as "Confidential," you will be notified of the request and thereby given an opportunity to immediately enforce and protect your rights by initiating an action in a court of competent jurisdiction. Should you fail to timely bring an action to enforce your rights, then the requested records will be released by The City or its Trust based upon its determination of the application of the Oklahoma Open Records Act.

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

SPECIFICATIONS

INTENT OF CONTRACT

The Oklahoma City Water Utilities Trust (OCWUT), "Contracting Entity" will accept electronic bids for Coagulants and Aids for Water Treatment Plants.

Bid Timeline

Bid release date	January 17, 2024
Final bid question accepted	February 15, 2024, at 5:00 pm
Final bid question answered	February 19, 2024 at 5:00 pm
Bid closes	February 28, 2024, at 10:00 am

CONTRACTING ENTITY

The term "Contracting Entity" as used throughout these specifications shall mean the Oklahoma City Water Utilities Trust (OCWUT). However, should The City of Oklahoma City or a PUBLIC TRUST of which The City of Oklahoma City is Beneficiary, choose to avail itself of goods or services from the resultant pricing agreement(s)/contract(s), the contracted vendor(s) will honor the terms and conditions, including price, of the pricing agreement(s)/contract(s).

SCOPE OF BID/PRICING AGREEMENT/CONTRACT

The bidder shall furnish and supply the item(s)/service(s) in accordance with the terms, conditions, and provisions set forth herein.

The Contracting Entity reserves the right to award this contract to a single vendor or to multiple vendors, whichever is deemed to be in the Trust's best interest. You may bid on some or all items. *If you choose not to bid on one of the items and/or services, respond by indicating, "NB" in the space provided.*

BID/PRICING AGREEMENT/CONTRACT PERIOD

The pricing agreement/contract shall be effective for a period of three (3) years, as approved by the Contracting Entity, with one (1) renewal option for a period of three (3) years.

The Bidder's performance will be evaluated on an ongoing basis during the duration of this contract. Based on these evaluations, the Contracting Entity's General Manager and/or appointed designee will determine if any problems exist. The following criteria will be applied in the contract evaluation performance process:

- The ability, capacity, and skills utilized by the contracted Bidder in the performance of the contract and providing the services required;
- Whether the contracted Bidder performed the requirements of the contract in providing the service promptly, or within the time specified, without delay or interference;

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

- The quality, availability and adaptability of the supplies, materials, and repair parts furnished to the particular use required.

BID/PRICING AGREEMENT/CONTRACT RENEWAL OPTION

Should the Contracting Entity desire to renew the pricing agreement/contract, a written notice shall be furnished to the contracted bidder prior to the expiration date of the pricing agreement/contract. The contracted bidder will indicate on the notice whether to accept or decline renewal of the contract, agreeing to continue pricing agreement/contract performance for an additional renewal option.

Upon receipt of the Contracting Entity's preliminary notice, the Bidder shall, if desired, submit a written agreement to continue Bid/Pricing Agreement/Contract performance for an additional three-year period.

Should the Contracting Entity exercise this option for renewal, the Bid/Pricing Agreement/Contract as renewed shall be deemed to include this option provision except that the total duration of this Bid/Pricing Agreement/Contract, including any renewals, shall not exceed six years without approval of the Contracting Entity.

In all cases Bid/Pricing Agreement/Contract renewals must be approved by the Contracting Entity.

ORDER OF PRECEDENCE

In the event of an inconsistency between provisions of this Bid/Pricing Agreement/Contract, the inconsistency shall be resolved by giving precedence in the following order: (i) Bid/Pricing Agreement/Contract articles, (ii) Technical Specifications, (iii) Specifications, (iv) Notice to Bidders, (v) General Instructions and Requirements for Bidders, (vi) other requirements provided by the Contracting Entity in the bid packet, then (vii) attachments, notes, and exceptions by Bidder.

COST ADJUSTMENT TERMS

Prices shall remain firm throughout the first twelve months of the contract period. At the request of the bidder, unit prices can be adjusted annually based on the year-over-year increase or decrease in the U.S. Bureau of Labor's Consumer Price Index, South Region. To find the CPI-U (South Region, All Urban Consumers), go to www.bls.gov/cpi. Charts are available on this website to show CPI for the previous 10 years.

For purposes of calculating an adjustment for the ensuing year, the base rate for the adjustment shall be the Target unit cost and labor rates in effect on the last day of the previous twelve months of the Agreement. Adjustments to the unit prices will be made only in units of one cent (\$0.01).

Cost adjustments are calculated in the following manner:

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

New Unit Price = Existing unit price(s) * (((CPI_n – CPI_o)/CPI_o) + 1)

Where, CPI_n = Consumer Price Index-U (All Urban Consumers), South Region, all items for the calendar month and year of the adjustment.

CPI_o = Consumer Price Index-U (All Urban Consumers), South Region, all items for the previous calendar month and year.

A valid written request consists of the following:

- Letter requesting price increase(s) must be submitted on your company letterhead along with the combined CPI_n and CPI_o chart from www.bls.gov/cpi.
- Signed by an officer or someone authorized to execute contracts on company's behalf
- Reference the assigned contract number
- Reference the Contracting Entity's bid number
- Reference the title of the contract (e.g. Hefner Water Treatment Plant – Emergency Generators, etc.)
- Must be submitted to: The City of Oklahoma City, Utilities Department, Contracts Administration Section, 420 W. Main Street, Ste. 500, Oklahoma City, OK 73102. Requests emailed to ww-procurement@okc.gov are acceptable.

ESTIMATED ANNUAL REQUIREMENTS (NO GUARANTEE)

The purchase of any such item or quantity is not guaranteed. Any offer conditioned upon a promise by the Contracting Entity to purchase a minimum or definite quantity of such an item will be rejected. The bidder agrees to furnish all quantities ordered by the Contracting Entity during the contract period.

When a contracted bidder has been awarded and is designated as the primary bidder, the Contracting Entity agrees to place all orders with the contracted Bidder for all requirements for those items shown in the price schedule, as awarded, except as follows:

Quantities of items needed under conditions of emergency or public exigency as approved by the OCWUT General Manager or designee.

Quantities of items obtainable from State contracts, as approved by the OCWUT General Manager or designee.

Quantities of items where federal funds are involved, and other actions are warranted for federal regulatory compliance purposes.

Quantities of items awarded under specific and separate contracts.

Quantities of items which otherwise are determined to be outside the general scope and intent of this contract.

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

When multiple contractors have been awarded contracts (multiple award), the Contracting Entity agrees to place all orders for the particular item or group of items, as shown on the price schedule, for which the contractor has been determined to be uniquely capable of supplying, as awarded, except as provided for in instances stated above.

If requirements for any awarded items do not materialize for the quantity estimated in the applicable price schedule, such failure shall not constitute grounds for equitable adjustment or additional compensation.

There is no obligation to purchase any items from this pricing agreement, and purchases made in future fiscal years or other contract periods are subject to future appropriations and availability of funds.

DELIVERY SCHEDULE

Any deliveries to the Contracting Entity shall be delivered **freight prepaid F.O.B. Destination-inside delivery**, Oklahoma City, Oklahoma, and to any and all points designated in the bid specifications.

Bidders shall specify their proposed delivery schedule for the requested materials on Technical Specifications (Bid Form A). If no alternative is proposed on the price schedule sheet, the awarded bidder(s) shall be expected to meet the stated delivery time of ten (10) calendar days after receipt of a delivery request from the Contracting Entity and 24 hours for emergency deliveries. An emergency delivery may be necessary from time to time in order to prevent the Contracting Entity from running out of a commodity used in the water treatment process within the next 24 hours. The Contracting Entity will endeavor to minimize the number of emergency deliveries. The Contracting Entity shall not be held liable for any and all damages sustained by the contracted bidder for delivery of materials awarded by contract.

Delivery of materials to the Contracting Entity without a purchase order document, purchase order number or purchasing card reference name and number given at the time the order is placed shall constitute an unauthorized purchase.

DELIVERY SCHEDULE

Bidders shall specify their proposed delivery times for the requested goods and/or services in the line item area of the electronic bidding system. If no alternative is proposed, the awarded Bidder(s) shall be expected to meet the stated deadline.

Bidder's delivery schedule shall be an important criterion in the evaluation of bids and recommendations for contract awards. The Bidder shall be required to deliver materials and supplies as specified in their bid after receipt of a purchase order from the Contracting Entity.

Specific Delivery Requirements

Deliveries of bulk chlorine shall be via tanker truck and are not to exceed 20 tons per tanker. **All shipments shall be accompanied by certified weight tickets and delivery ticket bill of landing.**

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Prices quoted must be for deliveries FOB inside delivery to the specified delivery point. The risk from any cause shall be borne by the Bidder until actual delivery and acceptance by the City. Delivery of bulk chlorine purchased under these specifications shall be made between the hours of **7:30 a.m. and 2:00 p.m., Monday through Friday**, as and when specified by water treatment plant personnel. Plant personnel will determine the inventories and order on an as needed basis. Although plant personnel will endeavor to place all orders four (4) days in advance, the supplier must be able to provide 24-hour emergency deliveries upon request.

The delivery location(s) are as follows:

LOCATION	ADDRESS	CONTACT
Draper Water Treatment Plant	13700 S. Douglas Blvd., Oklahoma City, OK. 73165	Plant Manager (405) 297-2841
Hefner Water Treatment Plant	3827 W. Hefner Road Oklahoma City, OK. 73120	Plant Manager (405) 297-3260

Inspection and Acceptance at Destination

Final inspection and acceptance shall be at destination. Although source inspection by the Contracting Entity is not anticipated under this contract, the provisions of this article shall in no way be construed to limit the rights of the Contracting Entity to otherwise conduct source inspections which it deems to be appropriate. The Contracting Entity reserves the right to test any load prior to the transfer and any load tested by the Contracting Entity that fails to comply with the Specifications shall constitute grounds for rejection of the load or for equitable adjustment to the Contracting Entity.

Security

The Bidder will be responsible for following all security procedures related to the delivery of chemicals at the plants. The Bidder may be required to sign a non-disclosure affidavit before receiving a copy of these procedures. ***Upon contract award the Bidder must contact the water treatment plants for security delivery procedures.***

Safety/Responsibility

The contracted bidder is to assure their employees are work and safety-trained, knowledgeable of all job-related hazards and must document training of their employees. The contracted bidder must assure their employees follow all safety rules; and must report to plant personnel any hazards and/or occurrences.

Security

The contracted bidder will be responsible for following all security procedures related to the delivery of chemicals at the plants. The contracted bidder may be required to sign a non-disclosure affidavit before receiving a copy of these procedures. ***Upon contract award the contracted bidder must contact the Water Treatment Plants for security delivery procedures.***

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Spillage/Clean Up

Contracted bidder will be responsible for proper clean up and disposal of any delivery chemical spills. An estimate of spillage will be deducted from the contracted bidder's invoice. The Contracting Entity shall not be held liable for any and all damages sustained by contracted bidder(s) for delivery of materials awarded by contract. The contracted bidder shall be liable to the cost of containment, clean up, and returning the site to the pre-spill condition.

Contracted bidder shall be responsible for connection of hoses and off-loading the chemical into City owned tanks. For safety reasons, an operator (City Employee) will be present during connection of hoses for bulk filling. The contracted bidder's driver shall be properly trained in emergency response and recovery. Additionally, the driver shall be considered the first responder in case of a leak or spill during the unloading procedure. If during the delivery and unloading the contracted bidder causes chemicals to be spilled or otherwise improperly discharged from storage vessels, piping, hoses, and connections, the contracted bidder shall contain, clean up, and return the site to the condition existing prior to the spill. The contract bidder shall be responsible for immediately reporting any chemical losses/spill due to loading to the appropriate State and Federal regulatory agency.

Commercial Packaging

Packaging and shipping of product shall conform to the current regulations of the U.S. Department of Transportation (DOT) and other applicable federal, state, and local requirements. Preservation, packaging, packing and marking will be in accordance with Bidder's best commercial practice, to provide adequate protection against shipping damage. **All tanker inlets and outlets must be secured by seals.**

SAFETY DATA SHEETS

Any Contractor supplying goods or materials to The City of Oklahoma City or a related Trust that require a Safety Data Sheet (SDS) will furnish the required sheet or a composite concentration list in one of the following manners:

- a. Submitted as part of the proposal document
- b. Submitted prior to agreement/contract award
- c. Submitted with the product invoice
- d. Submitted at the request of The City or Trust

In all instances, the Contractor shall furnish the safety data sheets with the products at delivery, and shall comply with all local, state and federal laws providing for identification of materials transported to or from The City or related Trust. The appropriate proposal number, agreement/contract number, delivery ticket number, or invoice number shall be clearly marked on the safety data sheet or the composite concentration lists. Information regarding Safety Data

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Sheets can be found on-line at <https://www.osha.gov/Publications/OSHA3514.html>. Any question regarding this requirement should be directed to the following address:

The City of Oklahoma City
Risk Management Division
420 W. Main Street, Suite 630
Oklahoma City, Oklahoma 73102
Attn: Environmental Specialist

PAYMENT METHODS

The ordering departments will utilize purchase order numbers for ordering the goods/services they require as the need arises during the pricing agreement/contract period. The Contracting Entity shall not be held liable for any and all damages sustained by any contractor for delivery of goods or services. The Contracting Entity agrees only to pay vendors for goods/services awarded by pricing agreement/contract if there is delivery and acceptance of the materials by the Contracting Entity and the delivery is accompanied by an authorized purchase order. Services performed for any Oklahoma City department without a purchase order document, purchase order number, or purchasing card reference name and number given at the time the order is placed shall constitute an unauthorized purchase.

PAYMENT/INVOICE

Payments will be processed promptly after completion of delivery of ordered items and after receipt of properly prepared invoices.

FOR ORDERS PLACED BY PURCHASE ORDER: The original invoice must be mailed directly to Oklahoma City Water Utilities Trust, Attn: Finance Operations, 420 West Main, Suite 500, Oklahoma City, OK 73102. In addition, invoices and payment correspondence may be emailed to wwfinancepayables@okc.gov. If invoices are e-mailed, a paper copy should not be mailed. This information is printed on the front of each purchase order. Copies of invoices may be sent to other addresses upon request. However, if the original invoice is sent to any other address, payment will be delayed, or may not be processed at all. Should another trust or government entity be using this contract they may request a different invoice address.

Invoices must contain the following information:

- a. Bidder's name and address
- b. Ship to address (department name)
- c. Purchase order number - **MUST BE INDICATED ON THE INVOICE**
- d. Itemization of each item purchased to include:
 - i. description/stock number
 - ii. unit price
 - iii. quantity
 - iv. unit of issue (each, box, dozen, pound, etc.)
 - v. total price
- e. Total amount of invoice
- f. Date of delivery

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

***Invoices should not reflect any outstanding backorders.**

INSURANCE REQUIREMENT

Liability and Property Damage Insurance: The Contractor assumes all risk incident to or in connection with its purpose to be conducted herein under and shall indemnify, defend and save The City of Oklahoma City and its' Trusts harmless from damage or injuries of whatever nature or kind to persons or property arising directly or indirectly out of the Contractor's operations and transportation of the City's equipment to and from repair site regardless of fault and arising from acts or omissions of its employees regardless of fault and shall indemnify, defend, and save harmless The City of Oklahoma City and its' Trusts from any penalties for violation of any law, ordinance or regulation affecting or having application to said operation.

In this connection, the Contractor shall carry Worker's Compensation in accordance with State Laws and General Liability Insurance in the following amounts:

Property Damage Liability - Limits shall be carried in the amount of not less than twenty-five thousand dollars (\$25,000) to any one person for any number of claims for damage to or destruction of property, including but not limited to consequential damages, arising out of a single accident or occurrence.

All Other Liability - In the amount not less than one hundred seventy-five thousand dollars (\$175,000) for claims including accidental death, personal injury, and all other claims to any one person out of a single accident or occurrence.

Single Occurrence or Accident Liability - In an amount not less than one million dollars (\$1,000,000) for any number of claims arising out of a single occurrence or accident.

Automobile Liability Insurance – The contractor shall maintain insurance coverage as to the ownership, maintenance, and use of all owned, non-owned, leased or hired equipment when said equipment is utilized to meet the requirements of this pricing agreement/contract.

The insurance policies shall be issued by a company authorized to do business in the state of Oklahoma and acceptable to The City of Oklahoma City and its' Trusts. The City shall be furnished with a Certificate of Insurance evidencing all the above-referenced requirements and shall state that such insurance shall not be changed or canceled without ten days prior written notice to The City of Oklahoma City. All policies shall be in the form of an "occurrence" insurance coverage or policy. If any insurance is written in a "claims made" form, the Contractor shall also provide tail coverage that extends a minimum of two years from the expiration of the Contract. Certificates of Insurance shall be delivered to The City of Oklahoma City prior to contract award. **The City of Oklahoma City shall be listed as the Certificate Holder. The policy description shall state the following: "The City of Oklahoma City and OCWUT are additional insured on all policies as required by the contract."**

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Unless otherwise approved by the City prior to contract award, self-insured retentions will not be accepted unless accompanied by a bond or irrevocable letter of credit guaranteeing payment of the losses, related investigations, claim administration, or defense expenses not otherwise covered by the Contractor's self-insured retention.

LIQUIDATED DAMAGES

If the Contractor fails to deliver the product within the specified delivery schedule as bid by the Contractor, it is understood the Contractor hereby agrees to liquidated damages of three hundredths percent (0.03%) of the invoiced price for each intervening calendar day greater than the delivery date specified in the bid and incorporated in this contract. The General Manager or designee may waive liquidated damages based on extenuating circumstances beyond the control of the Contractor. The Contractor shall notify the Contracting Entity if the delivery schedule cannot be met.

NOTICE OF NONCONFORMANCE

Nonconformance of carbon dioxide supply and/or shipment shall be based on a certified test report and/or documentation from the contracted bidder as to the quality of carbon dioxide to be shipped; or analytical tests performed by a certified laboratory, on either a sample provided by the supplier or collected by the Contracting Entity that shows the carbon dioxide shipment does not meet the requirements of this specification.

If the carbon dioxide delivered does not meet the chemical, physical, safety, or security requirements of this specification, the Contracting Entity shall notify the contracted bidder of this nonconformance and seek appropriate retest and/or material replacement within ten (10) days. The contracted bidder agrees to adjust the invoiced price by fifteen percent (15%) and/or reject each carbon dioxide supply and/or shipment that is determined to be in nonconformance.

WARRANTY

All bidders shall guarantee that the materials and supplies they propose to furnish shall be in accordance with the manufacturer's specifications and shall perform the functions for which they were designed, manufactured, and proposed by the bidders for use by the Contracting Entity.

The bidder warrants that at the time of delivery, all items furnished under this contract will be free from defects in material or workmanship and will conform to the specifications and all other requirements of this contract. All bidders will furnish with their bid one copy of their warranty applicable to the supplies or equipment to be furnished.

As to any item, which does not conform to this warranty, the contractor agrees that the Contracting Entity shall have the right to reject and return each nonconforming item to the contractor for correction or replacement at the contractor's expense. The Contracting Entity shall also have the right to require an equitable adjustment in the contract price. This warranty shall be in addition to any other rights of the Contracting Entity. All equipment warranties shall start on the date of installation and will be for the full term of said warranty.

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

RIGHT TO ACCEPT OR REJECT AND WAIVING OF FORMALITIES

The Contracting Entity reserves the right to reject any or all bids, to waive certain formalities, or to award the contract to the lowest and best bidder depending upon the selection criteria.

WHOLE AGREEMENT

It is expressly agreed by and between the parties hereto that the provisions embodied in the Request for Bids contain all covenants, agreements, obligations, rights, duties, and stipulations agreed upon by the parties hereto upon the execution hereof. No statements or representations, oral or written, not incorporated herein shall be a part of the Agreement.

INDEPENDENT CONTRACTOR

Bidder is, and shall always remain, an independent contractor with respect to activities and conduct while engaged in the performance of services for the Contracting Entity under this contract. It is expressly understood and agreed by the parties that Bidder shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant, or employee of Contracting Entity or the City of Oklahoma City; that Bidder shall have exclusive control of and the exclusive right to control the details of the work and services performed hereunder and all persons performing the same; that Bidder shall be solely responsible for the acts and omissions of its officers, agents, employees, and contractors, if any; and that nothing herein shall be construed as creating a partnership or joint venture between the Contracting Entity, Oklahoma City and the Bidder.

INDEMNIFICATION

To the maximum extent permitted by law, the Contractor shall be liable for and shall hold the City of Oklahoma City or any of its trusts harmless from all damage or injury caused to persons or property arising out of the performance of any contract resulting from this Request for Bid. The Contractor shall agree to assume the defense of the City and their officers and employees in all legal proceedings with third parties connected with the vendor's performance under this Contract, and to pay all expenses, including court costs and reasonable attorney's fees, incurred by OCWUT directly, or indirectly on account of such legal proceedings. The Contractor's obligations hereunder are expressly conditioned upon OCWUT's provision of notification to the Contractor of any pending such claim or suit, OCWUT shall cooperate with the Contractor in its handling of any such claim or suit to the extent their interests do not conflict. In no event shall the Contractor be obligated to indemnify or hold OCWUT harmless with respect to any liability caused by the sole negligence of OCWUT.

The OCWUT is a public trust created pursuant to the laws of the state of Oklahoma with the City of Oklahoma City, a municipality created pursuant to Article 18, section 3 of the Oklahoma Constitution, as its sole beneficiary. The OCWUT expressly reserves all Oklahoma common law and statutorily created and recognized rights and warranties, express and implied. The OCWUT expressly states that neither the OCWUT nor the City of Oklahoma City can or will waive any rights or warranties provided or available under

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Oklahoma law. By submitting a bid, the Bidder expressly agrees to comply with all such warranties. The Bidder acknowledges and by submitting a bid agrees that neither OCWUT nor Oklahoma City has or will waive any rights or warranties provided or available under Oklahoma law and that this paragraph will supersede and take precedence over any paragraph, term, or provision to the contrary.

CLARIFICATION

Any explanation, clarification, or interpretation desired by a bidder regarding any part of the solicitation must be requested in writing with sufficient time allowed for a written addendum to reach each bidder before the submission of their bid. Interpretations, corrections, or changes to the solicitation made in any other manner are not binding upon the Contracting Entity, and bidders shall not rely upon such interpretations, corrections, or changes. Oral explanations or instructions given before the award of the pricing agreement are not binding.

Technical questions are to be addressed through the electronic bidding system and the Buyer will respond electronically and issue addenda, if necessary. These specifications constitute a vital part of the vendor's bid proposal. The proposed bid must be submitted on these specifications and include any addenda. Failure to do so will result in a recommendation of bid rejection.

UNDUE INFLUENCE

Upon advertising this solicitation, no officer, employee, agent, or representative of the bidder shall have any contact or discussion, verbal or written, with any representative of the Contracting Entity (i.e. Trust Officer, City Council member, or City staff) either directly or indirectly through others in which the bidder seeks to influence any representative of the Contracting Entity regarding any matters pertaining to this solicitation.

Contacts by the bidder with the Contracting Entity that do not pertain to a solicitation are exempt from this provision. Examples of these exempt contacts are:

- Private, non-business, contacts with the Contracting Entity by the bidder's employees acting in their personal capacity
- Business contacts outside of this solicitation that the Contracting Entity may have with the Bidder
- Presentations and/or responses to inquiries initiated by the Contracting Entity
- Pre-bid or pre-proposal conferences
- Discussions with the City procurement officer or departmental contact as outlined in the Clarifications section above

If a representative of any bidder submitting a bid violates the foregoing prohibition by contacting any of these parties, such contact may result in the bidder being disqualified from the procurement process.

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

GENERAL PROVISIONS

The following documents are attached or by this reference incorporated as a part of this pricing agreement/contract:

- a. Bid/Pricing Agreement/Contract Form & Non-Discrimination Statement
- b. Anti/Non-collusion Affidavit
- c. General Instructions and Requirements for Bidders
- d. Specifications
- e. Oklahoma Open Records Act and Confidential Information

BID AWARD

The Contracting Entity reserves the right to award this contract by line item, by group of items, or all items of the bid; to reject any or all bids in whole or in part, if it is in the best interest of the Contracting Entity. "All or none" type bids will be considered only when it is deemed by the Contracting Entity to be in its best interest.

The Contracting Entity may choose to award contract(s) of a particular item or group of items to one or more contractors. Generally, the contractor(s) will be identified as Primary or Secondary contractors for the items or group of items based on the lowest and best bids(s) for those items or groups of items. From time to time, the Contracting Entity will make a multiple award of a particular item or group of items due to the uniqueness of products or services available based on received bids and the needs of the Contracting Entity.

In the event all bid(s) received for a single item or groups of items exceed the stated delivery requirements, the Contracting Entity reserves the right to consider the bids. In the event of similar/identical bids per line item or group of items, the award may be based on shortest delivery as per response from the vendor's delivery schedule sheet.

Normally, the Contracting Entity will endeavor to procure the materials and/or services only from the Primary vendor. If for any reason(s) the Primary vendor is unable to meet the requirements for the materials and/or services within the contracted period, or in emergency situations, unable to meet the critical needs as required, the Contracting Entity may procure such materials and/or services from the Secondary contracted vendors in that order, to meet its critical requirements.

Award Methodology

It is the Contracting Entity's intention to award based on the bidder's ability to meet the requirements of the specifications, lowest and best unit price; and best delivery schedule.

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

TECHNICAL SPECIFICATIONS

Pricing must be submitted through the Line Item area of the electronic bidding system.

The Technical Specifications are attached as a fillable form with Periscope (**Bid Form A**). Bidders must respond to each specification to whether the Bidder can meet the requirements. This form must be filled out in order for a bid to be considered.

Definition

The coagulants chemical covered by these specifications shall comply with the AWWA Standard B-406-06, American National Standards Institute/National Sanitation Foundation's Standard 60 -Drinking Water Treatment Chemicals.

Certification

All chemicals must be "certified to as suitable for contact with or treatment of drinking water by an accredited certification organization in accordance with ANSI/NSF Standard 60, Drinking Water Treatment Chemicals – Health Effects."1

Bidders should attach proof of certification and/or statement of application for certification with their bid. In the event the Bidder submits "statement of application for certification"; proof of certification when it is received must be submitted to the City of Oklahoma City. Failure to do so may result in the cancellation of the contract.

If there is a manufacturer's change, the contracted Bidder must immediately notify OCWUT and provide the required information that shows that the new material complies with these specifications. Failure to do so may result in the cancellation of the contract.

Where NSF or Underwriters Laboratory Certification is required, the Bidder shall enclose NSF or Underwriters Certification (listing, application or certification). If a vendor is accepted based on an application for Certification, the Certification must be submitted to the City of Oklahoma City once it is received. Failure to do so may result in the cancellation of the contract.

Chemical specifications sheet, i.e., vendor's product specifications sheet (This should contain information for both Technical Specifications and AWWA standard chemical analysis results.)

Current Water & Sludge Application

The coagulants currently used are listed as a reference only.

LOCATION	WATER	SLUDGE
Draper	<ul style="list-style-type: none">Chemtrade Hyper-Ion 3530	<ul style="list-style-type: none">Brenntag Bren FloccTMB 925 E
Hefner	<ul style="list-style-type: none">Brenntag WC-8301	<ul style="list-style-type: none">Brenntag AP-2659TMB 925 E

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

Substitute/Equivalent

Once award has been made, if there are any changes to the approved water application and sludge application, the new substitute/equivalent must be approved by OCWUT or designee and then submitted by Bidder for testing at Bidder's expense. The new substitute/equivalent must meet all performance requirements. To be considered for purchase without amendment of the agreement, list all coagulants offered, through the Line Item area of the electronic bidding system.

Safety/Responsibility

The Bidder is to document training of their employees to assure their employees are work and safety-trained, and knowledgeable of all job-related hazards. The Bidder must assure their employees follow all safety rules; and must report to plant personnel any hazards and/or occurrences.

Each chemical delivery truck has loading hatches; the loading hatches must be sealed upon delivery at the plant. In addition, they must be removed by the driver at the delivery site with an operator, City employee, present before samples are pulled. Any unsealed loads may be refused at no cost to the City.

The successful Bidder must fax or email delivery confirmation with date/time of expected delivery prior to shipment.

Analysis of Chemical Content

Analysis of the chemical content must be submitted through the line item area of the electronic bidding system. The chemical content must not exceed the maximum range specified by OCWUT in the line item area of the electronic bidding.

Coagulants and Aids

Successful Bidder will be responsible for clean up and any delivery chemical spills. An estimate of spillage will be deducted from the Bidder's invoice.

1. Ferric Sulfate (liquid)
Standard Specification: AWWA B-406-06

Chemical Content:

Manufactured using	Virgin iron ore
Free Acid as H ₂ SO ₄ (to maintain pH 2 solution)	Maximum 4.5% as H ₂ SO ₄
Water Soluble Ferric iron expressed as Fe ⁺⁺⁺	Minimum 12.0%
Water Soluble Ferrous Iron expressed as Fe ⁺⁺	1.5% Maximum of the 12.0% Fe ⁺⁺⁺
Water Soluble Ferrous Iron expressed as Fe ⁺⁺	3.0% Maximum in ferric sulfate
Water Insoluble Matter: Insoluble in liquid ferric sulfate	0.1% Maximum

Shipment:

- Approximately 20 – 25 tons in bulk quantity
- A weight certificate must accompany each truck

OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

- Each shipment must include a certified analysis on percentage ferric content and specific gravity from either the manufacturer or supplier
- Each shipment will be analyzed for specific gravity upon arrival. This is to verify ferric sulfate solution shipped

2. Polymers/Polymer Blend

The polymer, coagulant, coagulant aid, flocculant aid, and/or filter aid that works best can only be determined through performance laboratory screening (jar tests) and in plant trials using the water or wastewater to be treated under similar conditions of temperature, etc. Therefore, bids to be received are anticipated a large variety of polymers from various manufacturers.

Prospective Bidders will be allowed during the bid process, to perform jar testing at the three water treatment plants at their expense in order to determine the appropriate polymer to bid. If visits are requested, arrangements can be made by contacting Stephen Krausnick in the Water Quality Division at (405) 297-3800. Successful Bidders will also be allowed to provide a pre-paid shipping method to receive water samples from the three unique water sources to aid in determining the most effective polymer.

The Contracting Entity may elect to purchase limited quantities of product for full scale testing and evaluation of each plant

Polymer will be purchased based upon:

- Need
- Contracted laboratory screening/jar testing
- Contracted plant testing
- Most cost-effective

Shipment:

- Approximately 20-25 tons in bulk quantity
- Minimum of one tote or 55-gallon drums
- A weight certificate must accompany each truck

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OCWUT 19-24 Coagulants and Aids for Water Treatment Plants

LETTER OF AUTHORIZATION

THIS LETTER OF AUTHORIZATION MUST BE COMPLETED IF THE ATTACHED
LEGALLY BINDING DOCUMENT WAS NOT SIGNED BY THE STATUTORILY
AUTHORIZED OFFICER ON BEHALF OF THE CONTRACTING ENTITY.

City of Oklahoma City or related Public Trust:

This letter authorizes _____ to
(PRINTED NAME OF AUTHORIZED AGENT)
sign the attached legally binding document on behalf of _____,
(CONTRACTING ENTITY)
_____.

Sincerely,

_____ Signature of Authorized Agent	_____ Printed Title	_____ Date
_____ Printed Name of Authorizing Office		_____ Email Address of Authorizing Officer

NOTE: If the Contracting Entity is a(n):	
Corporation	The authorizing officer must be: President, Vice-President, Chairperson, or Vice-Chairperson
LLC	The authorizing officer must be: Manager, Managing Member, President, or Vice-President
Partnership	The authorizing officer must be: General Partner
Joint Venture	The authorizing officer must be: An Authorized Officer of Each of the Ventures

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**COAGULANTS AND AIDS FOR
WATER TREATMENT PLANTS
BID FORM A
OCWUT 19-24
REQUIRED ONLY IF BIDDING FERRIC SULFATE**

SPECIFICATIONS	BIDDER'S RESPONSE
1. ANSI/NSF Standard 60?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Standard Specifications AWWA B-406-06?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Please provide the Manufacturer and Brand Name:	<input type="text"/>
4. Manufactured using? Virgin Iron Ore	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Free Acid as H ₂ SO ₄ (to maintain pH 2 solution)? Maximum 4.5% as H ₂ SO ₄	<input type="text"/> % Max
6. Water Soluble Ferric Iron expressed as Fe+++? Minimum 12.0%	<input type="text"/> % Min
7. Water Soluble Ferrous Iron expressed as Fe++? 1.5% Maximum of the 12.0% Fe+++	<input type="text"/> % Max
8. Water Soluble Ferrous Iron expressed as Fe++? 3.0% Maximum in ferric sulfate	<input type="text"/> % Max
9. Water Insoluble Matter: Insoluble in liquid ferric sulfate? .01% Maximum	<input type="text"/> % Max
10. Specific Gravity? Range 1.42 to 1.44	<input type="text"/> Range

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**BID/PRICING AGREEMENT/CONTRACT FORM & NON-DISCRIMINATION
STATEMENT**
**BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS
DOCUMENT PRIOR TO SUBMITTING IN THE ELECTRONIC BID SYSTEM**

**Please be aware that typing in your password acts as your electronic signature, which is
just as legal and binding as an original signature.**

(See Electronic Signatures in Global and National Commerce Act for more information.)

**THIS DOCUMENT MUST BE ELECTRONICALLY SIGNED AND SUBMITTED WITH THE BID
OR THE BID WILL BE REJECTED**

INSTRUCTIONS: This document MUST be electronically signed and submitted with the bid for the bid to be valid. Failure to electronically sign the this document prior to submitting the electronic bid will result in rejection of your bid. This document constitutes your bid and will be the Pricing Agreement/Contract document under which you are to perform, should your bid be accepted, so it must be properly and completely executed. It is, therefore, essential that you are aware of its terms, as well as those contained in the specifications.

Submit this electronically signed document, along with all accompanying documents:

THIS PRICING AGREEMENT/CONTRACT is made and entered into, by and between
hereinafter referred to as "Bidder" and The City of Oklahoma City, a municipal corporation, or a participating Public Trust of which The City of Oklahoma City is Beneficiary hereinafter referred to as the "Contracting Entity."

WITNESSETH:

WHEREAS, the governing body of the Contracting Entity has approved certain specifications and requested by notice that bids be submitted thereon; and

WHEREAS, this document until executed by the Mayor/Chairman of the Contracting Entity constitutes the Bidder's proposal; and

NOW, THEREFORE, that in consideration of the covenants, agreements and representations as hereinafter set forth, it is mutually agreed by the parties that:

1. The Bidder agrees to sell and deliver to the Contracting Entity, the items of material and/or services, specified in the pricing section of the electronic bid submittal, which is attached hereto and made a part of this Pricing Agreement/Contract. List the prompt payment discount, if any, for this agreement in the space provided below:

Discount for Prompt Payment % Days

2. The Bidder expressly warrants that all articles, material, and/or work covered in this Pricing Agreement/Contract will conform to the specifications and electronic bid documents attached to this bid and are hereby incorporated, as if set forth in full herein; and further warrants that the same shall be of good material and workmanship, and free from defects.

3. The Bidder understands that all bids are to be submitted in U.S. dollars at a firm price. Bids submitted in any currency other than U.S. dollars will be rejected.

4. The Bidder also understands that all invoices shall be submitted in U.S. dollars and agrees to accept payment in U.S. dollars as full satisfaction of the invoiced amount.

5. If any of the goods fail to meet the warranties contained in Paragraph 2, above, the Bidder, upon notice from the Contracting Entity, shall promptly correct or replace the same at the Bidder's expense. If the Bidder shall fail to so do, the Contracting Entity may cancel this order as to all such goods, and in addition, may cancel the then remaining balance of this order. After notice to the Bidder, all such goods will be held at the Bidder's risk. The Contracting Entity may, at the Bidder's direction, make available such goods to be returned to the Bidder at the Bidder's

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risk, and all transportation charges, both to and from the original destination, shall be paid by the Bidder. Any payment for such goods shall be refunded by the Bidder unless the Bidder promptly corrects or replaces the same at the Bidder's expense.

6. The Contracting Entity agrees to pay to the Bidder the price and amount in accordance with Paragraph 1 above, based on the quantity actually purchased, upon delivery to and acceptance by the Contracting Entity, of the material and/or service[s] above described and upon the filing by the Bidder, and approval by the Contracting Entity, of a verified claim for the amount due.

7. The Bidder agrees, in connection with the performance of work under this Pricing Agreement/Contract:

a. That the Bidder will not discriminate against any employee or applicant for employment, because of race, creed, color, sex, age, national origin, ancestry or disability. The Bidder shall take affirmative action to ensure that employees are treated without regard to their race, creed, color, age, national origin, sex, ancestry or disability. Such actions shall include, but not be limited to, the following: employment, promotion, demotion or transfer, recruitment, advertising, lay-off, termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. The Bidder agrees to post, in a conspicuous place available to employees and applicants for employment, notices to be provided by the City Clerk/Secretary of the Contracting Entity setting forth the provisions of this section, and;

b. That the Bidder agrees to include this non-discrimination clause in any subcontracts connected with the performance of this Pricing Agreement/Contract.

8. In the event of the Bidder's non-compliance with the above non-discrimination clause, this Pricing Agreement/Contract may be canceled or terminated by the Contracting Entity. The Bidder may be declared by the Contracting Entity ineligible for further Pricing Agreement[s]/Contract[s] with the Contracting Entity until satisfactory proof of intent to comply is made by the Bidder.

9. The risk of loss or damage shall be borne by the Bidder at all times until the acceptance of goods, properly packed, by the Contracting Entity.

10. This Pricing Agreement/Contract, specifications, electronic bid submittal documents and any attachments constitutes the entire understanding and agreement of the parties upon the subject matter hereof. There is no agreement, oral or otherwise, which is not contained in or attached to this Pricing Agreement/Contract. This Pricing Agreement/Contract may not be modified or assigned unless approved in writing and signed by both parties.

11. The parties assume and understand that the variables in the Bidder's cost of performance may fluctuate; consequently, the parties agree that any fluctuations in the Bidder's costs will not alter the Bidder's obligations under this Pricing Agreement/Contract nor excuse performance or delay on the Bidder's part.

12. This Pricing Agreement/Contract shall be inoperative during such period of time that the aforesaid delivery or acceptance may be rendered impossible by reason of fire, Act of God or government regulation. Provided, however, to the extent that the Bidder has any commercially reasonable alternative method of performing this Pricing Agreement/Contract by purchase on the market or otherwise, the Bidder shall not be freed of any obligations hereunder by this clause, even though the goods intended for this Pricing Agreement/Contract were destroyed or their delivery delayed because of an event described above.

13. The shipping or receiving of any goods under this Pricing Agreement/Contract shall not be deemed, or be, a waiver of any right to damages for any prior failure to ship or receive any goods.

14. This Pricing Agreement/Contract shall be governed by the laws of the State of Oklahoma.

15. The Bidder shall be responsible for complying with all applicable federal, state and local laws.

16. If submitting a bid for services, the Bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) through the Department of Homeland Security and available at www.dhs.gov/E-Verify.

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The undersigned individual states that the Bidder will be bound by all components of its bid, the specification, the terms and conditions of the Pricing Agreement/Contract, and the requirements for Bidders.

WITNESS the hands of the parties hereto:

THIS FORM MUST BE ELECTRONICALLY SIGNED AND SUBMITTED WITH THE BID FOR THE BID TO BE VALID

Note: The owner or an officer of the business or corporation may sign this document. A Corporate Seal or a letter of authorization is needed for any other signer. For instance, if a Salesman or Manager signs this form, a letter of authorization or Corporate Seal is to be attached.

Type Name of Authorized Agent

Title of Authorized Agent

Company Name and Address

Zip Code

Telephone Number and Fax Number if any

BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS DOCUMENT

Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature.

(See Electronic Signatures in Global and National Commerce Act for more information.)

THIS FORM MUST BE ELECTRONICALLY SIGNED AND SUBMITTED WITH THE BID OR THE BID WILL BE REJECTED

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NON-COLLUSION AFFIDAVIT

BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS DOCUMENT PRIOR TO SUBMITTING BID

Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature.

(See Electronic Signatures in Global and National Commerce Act for more information.)

The undersigned, of lawful age, being duly sworn, upon oath, deposes and says: That the undersigned has the lawful authority to execute the within and foregoing proposal/bid for, and on behalf of, the Proposer/Bidder; that the Proposer/Bidder has not, directly or indirectly, entered into any agreement, express or implied, with any Proposer/Bidder, having for its object the controlling of the price or amount of such proposal/bid, the limiting of the proposals/bids or the Proposers/Bidders, the parceling or farming out to any Proposer/Bidder or other persons, of any part of the Agreement or any part of the subject matter of the proposal/bid, or of the profits thereof, and that Proposer/Bidder has not and will not divulge the sealed proposal/bid to any person whomsoever, except those having a partnership or other financial interest with the Proposer/Bidder in the said proposal/bid, until after the said sealed proposals/bids are opened.

The undersigned further states that the Proposer/Bidder has not been a party to any collusion: among Proposer/Bidders in restraint of freedom of competition, by any agreement to bid at a fixed price or to refrain from proposing; or with any City/Trust official, City/Trust employee or City/Trust agent as to the quantity, quality, or price in the prospective Agreement, or any other terms of the said prospective Agreement; or in any discussions between the Proposers/Bidders or City/Trust official, City/Trust employee or City/Trust agent concerning the exchange of money or other thing of value for special consideration in the letting of Agreement. The Proposer/Bidder states that it has not paid, given or donated or agreed to pay, give or donate to any City/Trust official, officer or employee of the City or awarding agency, any money or other thing of value, either directly or indirectly, in the procuring of the award of Agreement pursuant to this Proposal/Bid.

Witness the hands of the parties hereto:

The undersigned states that the Proposer/Bidder will be bound by its proposal/bid, the specification, the terms and conditions of the Agreement, and the Requirements for Proposer/Bidders.

→ THIS FORM TO BE COMPLETED BY THE PROPOSER/BIDDER PRIOR TO AGREEMENT APPROVAL ←

<input type="text"/>	<input type="text"/>
Type Name of Authorized Agent/Representative	Title
<input type="text"/>	
Company Name	
<input type="text"/>	<input type="text"/>
Address	Zip Code
<input type="text"/>	
Telephone Number and Fax Number, if any	

TO BE COMPLETED BY THE NOTARY:

State of *)
<input type="text"/>) SSS
County of *)
<input type="text"/>	

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[*State and County where notarized must be typed in for bid/proposal to be considered.][SAK1]

Signed and sworn to before me on this day of , by

[Day] [Month] [Year] [Print the name of the agent/representative who signed above.]

My Commission Number:

[Oklahoma] Type Name of Notary Public

My Commission Expires:

[Date/Year]

[49 Okla. Stat. 2011 §119]

BIDDER MUST ELECTRONICALLY COMPLETE, SIGN AND NOTARIZE THIS DOCUMENT PRIOR TO SUBMITTING BID

Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature.

(See Electronic Signatures in Global and National Commerce Act for more information.)

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BIDDER MUST ELECTRONICALLY COMPLETE THIS FORM PRIOR TO SUBMITTING BID

SUPPLIER CONTACT INFORMATION

The purpose of this form is to assist various City Departments and Trusts with placing orders.

Sales Contact:

Company Name:
Address:

Contact Person: Email Address:
Telephone Number: Fax Number:

Billing Contact:

Company Name:
Address:

Contact Person: Email Address:
Telephone Number: Fax Number:

Service Contact:

Company Name:
Address:

Contact Person: Email Address:
Telephone Number: Fax Number:

After Hours Emergency Number(s)
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CONTRACTOR/VENDOR BACKGROUND CHECKS FOR ACCESS TO OR WORK IN CITY AND TRUST BUILDINGS AND STRUCTURES

The City has established a policy to better secure City and/or Trust owned or operated buildings and structures by requiring background and fingerprint checks of Non-City employees as a condition precedent to entering City and/or Trust buildings and structures. **Contractor/vendor employees and agents who will be required to enter City and Trust buildings and structures to perform a City or Trust Contract will be required to obtain and provide an Oklahoma State Bureau of Investigation background and fingerprint check to the General Service Director or designee before such Contractor/Vendor employee or agent will be permitted to enter City and/or Trust buildings and structures unescorted, at their cost.**

The General Services Director will establish and maintain a list of Non-City employees authorized to enter City and/or Trust buildings and structures. Background and fingerprint records will be maintained by the General Services Department in a secure location within the City's internal network. Said records will be destroyed within sixty days of: 1) final acceptance by the City Council in the case of construction projects, 2) termination or expiration of a procurement pricing agreement, 3) termination or expiration of an engineering, architectural or planner agreement, or 4) termination or expiration of a professional services agreement, unless the Contractor/Vendor has another contract or agreement. The City reserves the right and authorizes the General Services Director or designee to request and require any such background check be updated and resubmitted. In addition, the Contractor/Vendor acknowledges and agrees that Contractor/Vendor employees and agents will be asked to verify their identity with a government issued picture identification (Driver's License, Passport, Oklahoma issued Identification Card) from the employee or agent's state of residence to enter City and/or Trust owned or operated buildings and structures.

Arrest and/or conviction records may disqualify Contractor/Vendor employees or agents from access or for work in City or Trust buildings and structures.

In addition to the Sex Offenders Registration Act (57 O.S. Section 581 *et seq.*) and the Mary Rippey Violent Crime Offenders Registration Act (57 O.S. Section 591 *et seq.*), the following criteria will be used when reviewing Contractor/Vendor employee or agent requests for building access:

- (a) Any unpardoned felony conviction or plea of nolo contendere may be disqualifying, depending on the nature of the conviction and the relation to the scope of the contract or price agreement, except under the following circumstances:
1. Access to City or Trust buildings and structures is contingent upon successful completion of two (2) years of a deferred or suspended sentence (if the sentence exceeds two (2) years), otherwise, after successfully serving the complete sentence. Applicants must submit two (2) favorable written references, one (1) of which must be from an employer with whom the individual has worked within the last two years. Situations where the applicant is unable to provide a written reference from an employer with whom the individual has worked within the last two (2) years will be reviewed by the General Services Director or designee on a case-by-case basis.
 2. Applicants convicted of a felony and ordered to serve time with the Department of Corrections may be eligible for access, depending on the nature of the conviction and the position sought, two (2) years from the date of parole. Applicants must submit two (2) favorable written references, one (1) of which must be from an employer with whom he or she has worked within the last two (2) years will be reviewed by the General Services Director or designee on a case-by-case basis.

- (b) Any unpardoned conviction(s) involving the following offenses may be disqualifying: moral turpitude; non-consensual sex acts; distribution or trafficking of controlled dangerous substances; assault and battery with a dangerous weapon, or any offense involving a minor as a victim.
- (c) Any applicant who has been convicted of a felony, is a current defendant of a Victim Protection Order (VPO) or has been convicted of a misdemeanor crime of Domestic Violence, will not be considered for facility access. Misdemeanor convictions and traffic violations will be evaluated on an individual basis and may be disqualifying.
- (d) Any applicant with a pending felony or misdemeanor charge (other than minor traffic violations) will be ineligible for access, until a final disposition of the charge is made.
- (e) Any conviction that has been pardoned or expunged cannot be considered in a facility access decision.

If it is determined that information obtained through the applicant's OSBI criminal records check makes the applicant unsuitable for access to City or Trust buildings or structures, the General Services Department will notify the applicant immediately and provide a copy of any criminal record information.

- (a) The applicant will be given seven (7) business days to provide information that negates the validity and relevance of the criminal record. If the information obtained through the criminal records check cannot be invalidated by the applicant, the applicant will be denied facility access.
- (b) In determining an applicant's suitability for facility access, the General Services Department will consider information including, but not limited to the following:
 - 1. Relevance of the crime to the proposed work to be performed.
 - 2. Nature of the work to be performed;
 - 3. Recency of the conviction;
 - 4. Sensitivity of and potential risk to accessible information, systems, or equipment; and
 - 5. Potential risk or threat to City employees.

Upon approval of a contract or agreement by the City Council/Trust, the successful Contractor(s)/Vendor(s) will be required to submit to the General Services Department the following completed documents for **each** employee requiring access to City or Trust buildings and structures to fulfill the terms of the contract or agreement.



- 1. Non-Employee Building Access Request Form – available upon request at (405) 297-2123
- 2. OSBI Criminal History Information Request Portal Response – available at <http://www.ok.gov/osbi/CriminalHistory/CHIRP>

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**OCWUT 19-24 COAGULANTS AND AIDS FOR WATER TREATMENT
PLANTS****ADDENDUM NO. 1**

Issued: February 5, 2024

To: PROSPECTIVE BIDDERS

From: Mark Keesee, Administrative Specialist Through: Chris Browning, General Manager 

Department: Utilities Department

The above referenced bid was advertised in the Journal Record and released online through Periscope on January 17, 2024.

The City has determined a need to issue an addendum to OCWUT 19-24 to add the following:

In Section **Specific Delivery Requirements pages 13-14**: Bulk Chlorine is listed in two (2) areas of the paragraph and should be listed as Coagulants and Aids.

In Section **Notice of Nonconformance page 17**: Carbon Dioxide was listed in five (5) areas of the paragraph and should have been listed as Coagulants and Aids.

In line items:

We are wanting pricing for the 55 Gallon Drums, Totes and Bulk Quantity.

1) Group 1, Product Details: Remove Bid Price Per lbs. for Ferric Sulfate Liquid

Bid Price Per lbs.	AWWA B-406-06 Ferric Sulfate liquid. Estimated monthly consumption 95,000 lbs. Enter price per lbs.	OCWUT 19-24-01-03
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2) Group 2, Product Details: Remove Bid Price Per lbs. for Polymer/Polymer Blends

Bid Price Per lbs.	Polymers/Polymer Blends. Estimated monthly consumption 400,000 lbs. Enter price per lbs.	OCWUT 19-24-03-01
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3) Group 3, Product Details: Remove Bid Price Per lbs. for Polymer/Polymer Blends

Bid Price Per lbs.	Polymers/Polymer Blends. Estimated monthly consumption 400,000 lbs. Enter price per lbs.	OCWUT 19-24-03-01
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APPROVED


Chris Browning, General ManagerC
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Question and Answers for Bid #OCWUT 19-24 - Coagulants and Aids for Water Treatment Plants

Overall Bid Questions

Question 1

May I get the current price for Ferric Sulfate? (Submitted: Jan 19, 2024 9:37:03 AM CST)

Answer

- We are paying \$296.25 per ton for Ferric Sulfate. (Answered: Jan 19, 2024 1:09:32 PM CST)

Question 2

Please review the "Specific Delivery Requirements" section. The current section only refers to Bulk Chlorine Deliveries and not the delivery of Coagulants and Aids. Are there "Specific Delivery Requirements" for the Coagulants and Aids that should be noted in this section? (Submitted: Jan 26, 2024 1:31:36 PM CST)

Answer

- See Addendum 1 (Answered: Feb 5, 2024 4:03:10 PM CST)

Question 3

Please review the "Notice of Nonconformance" section. The current sections refers specifically to Carbon Dioxide only. Will this section be revised to refer to Coagulants and Aids rather than Carbon Dioxide? (Submitted: Jan 26, 2024 4:01:22 PM CST)

Answer

- See Addendum 1 (Answered: Feb 5, 2024 4:03:10 PM CST)

Question 4

I noticed the Letter of Authorization changed slightly this year. You are requiring a signature of a Manager, Managing Member, President or Vice President for a LLC. Will a Corporate Secretary be acceptable as a "Managing Member"? (Submitted: Jan 31, 2024 10:12:29 AM CST)

Answer

- If the position is not listed on the Letter of Authorization, then we will need a Letter of Authorization. (Answered: Jan 31, 2024 4:44:59 PM CST)

Question 5

Does this opportunity require the awarded bidder to accept credit cards as a form of payment? (Submitted: Jan 31, 2024 11:20:05 AM CST)

Answer

- No. (Answered: Jan 31, 2024 12:40:34 PM CST)

Question 6

On the pricing sheet, there is a line marked "price per lb" and another marked "price per lb for bulk quantity".

C
2
4
9
0
5
1

What is the difference between the two options? (Submitted: Jan 31, 2024 1:03:33 PM CST)

Answer

- See Addendum 1 (Answered: Feb 5, 2024 4:03:10 PM CST)

C
2
4
9
0
5
1