STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

INFORMATION AND INSTRUCTIONS FOR BIDDERS, PROPOSAL, CONTRACT AND BOND FORMS AND SPECIFICATIONS FOR

CONTRACT NO. M-571-R

FOR

FURNISHING ALUMINUM CHLOROHYDRATE-POLYMER BLEND

Dr. Michael Neopolitan

President of the Board

Richard K. Hale

Board Member

Vernard Richberg

Board Member

Germaine Bennett

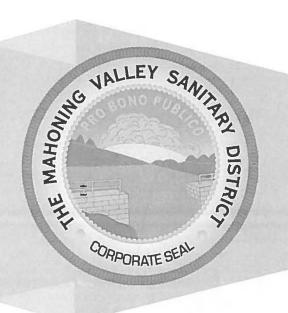
Board Member

James W. Jones, P.E.

Chief Engineer

Rhonda Lucivjansky, CPA, MBA

Secretary/Treasurer



2020

Section 1.0 Instruction to Bidders

STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-571-R

FOR FURNISHING

ALUMINUM CHLOROHYDRATE-POLYMER BLEND 1 JANUARY 1, 2021 TO DECEMBER 31, 2021

INSTRUCTIONS TO BIDDERS

Sealed bids for proposals for Furnishing ALUMINUM CHLOROHYDRATE—POLYMER BLEND in compliance with NSF/ANSI 60 and 61: Drinking Water Treatment Chemicals; Drinking Water System Components will be received at the office of The Mahoning Valley Sanitary District, Water Purification Plant, in Weathersfield Township, Trumbull County, Ohio (mail address: PO Box 4119, Youngstown, Ohio 44515 or 1181 Ohltown-McDonald Rd., Mineral Ridge, Ohio 44440), until 1:30 p.m., Eastern Standard Time on Tuesday, December 8, 2020.

The Water Purification Plant is located in Weathersfield Township, Trumbull County, Ohio, about two miles south of the center of the City of Niles, and near Mineral Ridge, Ohio.

The contract is for furnishing and delivering the above chemical as therein provided for use in connection with operation of the Water Purification Plant of the District for the

JANUARY 1, 2021 TO DECEMBER 31, 2021

IB-1. FORM OF PROPOSAL.

Bids shall be based on specifications and are to be made upon the blank form of proposal hereto attached. The form of proposal is not to be changed; each blank space provided therein for the entries are to be filled in, and each bidder shall furnish all information called for in the proposal and specifications. The Board requests that no alterations or interlineations be made by the bidder. If, however, the contractor is unwilling to submit his bid on the regular form without qualification he shall submit the bid on the proposal herein accompanied by a letter setting forth the qualifying provisions and insert and attach the letter hereto.

The proposal must give the price for the chemical proposed both in writing and in figures.

The Proposal must be submitted on the form of Proposal included in the Contract Documents. The form shall not be separated from the Contract Documents nor altered in any way. The Proposal must be signed and enclosed in a sealed envelope which shall be endorsed with the name and address of the bidder and with the words "Proposal for Furnishing Aluminum Chlorohydrate-Polymer Blend", and addressed to the Board of Directors.

If the proposal is made by an individual, it shall be signed with his usual business signature, with his business address and place of residence; if by a firm, the copartnership name shall be signed by a member of the firm, and the name and address of each member shall be given; if by a corporation, it shall be signed by a duly authorized officer, with the corporate name attested by the corporate seal, and the business address of the corporation shall be given.

IB-2. FREIGHT RATES/FUEL CHARGES.

Bidders shall include any freight rate and/or fuel charges within their bid.

IB-3. BIDDERS MATERIAL QUALITY/QUALIFICATION QUESTIONAIRE

The Bidder must furnish on the Bidder's Material Quality/Qualification Questionnaire form included in the Proposal Section information such as evidence of nature of the material proposed to be supplied and other water purification facilities where the product has been furnished per Section 12 of the Specifications.

IB-4. BID GUARANTY REQUIRED.

All Bid Proposals shall be accompanied by a *Bid Guaranty* in the amount of 10% of the bid reflecting the highest estimated usage and in the form as prescribed herein. Documentation certifying the surety is licensed to do business in the State of Ohio shall be provided.

IB-5. PERFORMANCE BOND REQUIRED.

A bond in the form hereto attached in the full amount of the contract will be required of the successful bidder for the faithful performance of the contract and to indemnify and save harmless the District and its officers and agents from claims, suits, and actions. The full amount of the contract will be based on the highest estimated usage. The bond shall be signed by the contract and by a surety company or companies authorized to do business in the State of Ohio, and satisfactory to the Board. Should any surety upon the contract at any time be deemed by the Board to be unsatisfactory, notice to the effect shall be given to the contractor, who shall forthwith substitute a new surety or sureties satisfactory to the Board; in such case, no further payment shall become due or be made under the contract until the new surety shall have been accepted by the Board.

IB-6. EXECUTION OF CONTRACT.

The bidder to whom the contract is awarded will be required to execute and deliver the contract and bond within ten (10) days from the date that notice of such award is given by the Board to him either personally or by mail directed to the business address stated in the proposal, and in case of failure or neglect to do so shall be deemed to have abandoned the contract.

IB-7. APPROXIMATE QUANTITY.

The estimated quantity of use as given in the specifications is approximate and is given only as a basis for the uniform comparison of bids. The actual quantity required to be furnished under this contract may be greater or less than the quantity estimated as may be necessary in the judgment of the Board for the proper operation of the District works; and an increase or decrease in the quantity shall not be regarded as ground for a change in the unit price or claim by the contractor for loss or damage.

In considering the various proposals received the Board will take into account the unit price proposed, the quality (including contents of impurities) and properties of the chemical offered in the proposal, and the previous use thereof in water purification operations.

Along with the proposal, the contractor shall submit analyses results from a certified representative sample of all contents including impurities.

For purposes of this contract, a unit ton shall be defined as 2,000 pounds.

IB-8. BIDDERS AFFIDAVITS:

- A. Each bidder is required to submit with hid Bid an affidavit stating neither he nor his agents, nor any other party for him has paid or agreed to pay, directly or indirectly, any person, firm or corporation money or other valuable consideration for assistance in procuring or attempting to procure the contract herein referred to, and further agreeing that no such money or reward will be hereafter paid. This affidavit must be on the form which is attached hereto.
- B. Each Bidder which is a foreign corporation, that is, a corporation not charted in Ohio but licensed to do business in Ohio, is required to submit with his Bid an affidavit duly executed by the President, Vice President or General Manager of the corporation stating that said foreign corporation has, in accordance with the provisions of the Revised Code of the State of Ohio, obtained a certificate authorizing it to do business in the State of Ohio. (The certificate or certified copies of such certificate may be obtained from the Office of the Secretary of State, Columbus, Ohio.)

IB-9. EXPLANATIONS, WRITTEN OR ORAL:

Any Bidder finding a discrepancy or omission in the specifications or having any doubt as to their meaning shall immediately notify the Chief Engineer or his designated representative. The Chief Engineer will respond by sending written notices of instructions to all Bidders. The MVSD will not be responsible for oral instructions

IB-10. WITHDRAWAL OF BID:

No Bid will be allowed to be withdrawn after it has been deposited with the Treasurer of the MVSD until all bids have been opened, in accordance with the requirements of Ohio Revised Code Section 9.31;

IB-11. PRICE BIDS AND DISCOUNTS:

A. Unit Price

The Bid price shall be per unit of items to be bid on, stated in figures in the spaces to provided.

B. Trade Discounts

When the Bidder offers a trade discount, the amount of such discount shall be stated on the Bid blank. Where the Bidder submits his quotation by filing his <u>catalog</u>, price list and discount, such documents shall be made part of the Bid and must be <u>separately signed</u> by the same person and in the same manner as used on the Bid form.

C. Discount for Prompt Payment

A discount of two percent (2%) will be taken on payment made within thirty (30) days from the invoice date for materials, supplies, equipment or nonprofessional services, unless the Bidder offers a different discount or indicates otherwise in the space provided on the Bid Form

IB-12. DISCOUNTS USED TO DETERMINE LOWEST AND BEST BID:

In determining the lowest and best Bid, the MVSD will consider all Bids on a basis of the net price to be paid after deduction of the discount specified or calculated according to Section IB-10 (C), except that if the terms specified by the Bidder require payment in less than fifteen (15) days from the date of the invoice, the discount offered will not be deducted from the price named in the Bid to determine the lowest and best Bidder, and the Bid will be considered only on the basis of the unit price actually named in the Bid. But if, notwithstanding the provision of this paragraph, such Bid is determined to be the lowest and best Bid, the MVSD reserves the right to accept the terms named in the Bid if such terms are to the advantage of the MVSD as a basis for payment of invoices only, but not in any case as a basis for determining the lowest and best Bidder.

Section 2.0 Proposal

STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-571-R

FOR FURNISHING

ALUMINUM CHLOROHYDRATE-POLYMER BLEND

JANUARY 1, 2021 TO DECEMBER 31, 2021

PROPOSAL

To the Board of Directors of THE MAHONING VALLEY SANITARY DISTRICT

FROM CHEMTRADE CHEMICALS US LLC

o the Treasurer				
BID FOR ALUMINUM CHLOROHYDRATE-POLYMER BLEND				
The Undersigned proposes to furnish the above materials, supplies or equipment, and to accept a full compensation therefore the price per unit multiplied by the number of units of such commodity purchased herunder, (which units and prices therefore are set forth in the schedule of items hereto attached and made part of this bid) and subject to any discount set forth in this bid.				
The undersigned further certifies that he (as an individual, firm or corporation making this bid) is not in arrears or default to the MVSD upon any debt or contract, nor is a defaulter as surety or otherwise upon any obligation to said MVSD nor has failed to perform faithfully any previous contract with the said MVSD and that there is not suit or claim pending as to any such arrears or default.				
THE UNDERSIGNED UNDERSTANDS THAT THE MVSD RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS.				
The firm, corporation, or individual name CHEMTRADE CHEMICALS US LLC				
MUST BE SIGNED IN SPACE INDICATED Sign Chaleth Lepson				
Name Typed or Printed ELIZABETH RYNO				
Title of Officer MARKETING SPECIALIST				
Business Address of Bidder 90 EAST HALSEY ROAD, STE 200 PARSIPPANY, NJ 07054				
IDDER MUST COMPLETE AND SIGNED State Where Incorporated DELAWARE				

_(COMPANY)

INVITATION AND BID

MAHONING VALLEY SANITARY DISTRICT

1181 Ohltown-McDonald Road

(330) 652-3614 · FAX: (330) 652-6293				
TITLE OF BID				CONTRACT NO.
FURNISHING OF ALUMINUM CHLOROHY	YDRATE-POLYM	MER BLEND		M-571-R
	RESOLUTION NO.			ADOPTED
X REQUIREMENT PURCHASE				
BID OPENING		ADVERTISEMENT DAT	ES	
DECEMBER 8, 2020 1:30 PM OFFICIAL LOCAL TIME		www.me	anderwate	r.org
FY2021 JANUARY 1, 2021 TO DECEMBER S				
WATER PURIFICATION	Quantity	Deice		Free and and Crob misses of
ALUMINUM CHLOROHYDRATE-POLYMER	(tons)	<u>Price</u> (per ton)		<u>Extended Submitted</u> <u>Bid Summary</u>
ALOMINOM CHEOROTTORATE-FOLTMER		(per torr)		blu Summary
ALUMINUM CHLOROHYDRATE-POLYMER BLEND (12-MONTH) FY 2020	1650 x	\$ *840.00	= \$	1,386,000.00
	x	\$	= \$	
		T	-	
TOTAL AMOUNT OF SUBMITTED BID = \$ 1,386,000.00				
*PRODUCT BEING BID ON IS CHEMTRADE'S HYPER+ION 805				
TOTAL AMOUNT OF SUBMITTED BID IN W	RITING			
ONE MILLION THREE HUNDRED EIGHTY SIX	THOUSAND DOLLA	RS AND ZERO CENT	rs	
NOTE:				
Bidders must include with their bids the re	equired amount	of information	described in	
Sections 1, Paragraphs IB-3, IB-4, IB-5, and	IB-8			
			ĺ	PAYMENT DISCOUNT
			1	(If left blank, automatic
				2% 30 days per IB-11-C)
				-0- %
				30 Days
CHEMTRADE CHEMICALS US LLC, 90 EAST HALS		200, PARSIPPANY, N	07054	
Name of Company and Address	City		State	Zip
Chalithteror	DECE	EMBER 3, 2020	8	00-441-2659
Authorized Signature	Date		Ph	one No.
ELIZABETH RYNO, MARKETING SPECIALIST				

Section 3.0

Non Collusion Affidavit

Bidder's Material Quality Certification/Qualification Questionaire.

Bid Bond

Performance Bond

NON-COLLUSION AFFIDAVIT

NEW JERSEY

STATE OF: ON NORRIS COUNTY OF: THE UNITED STATES

MAHONING VALLEY SANITARY DISTRICT 1181 OHLTOWN-MCDONALD RD, MINERAL RIDGE, OH 44440

ELIZABETH RYNO	,* bo	eing first duly sworn, depos	ses and says as follows:
That the Affiant is_	MARKETING SPECIALIST		**
of CHEMTRADE	CHEMICALS US LLC		, *** the
did not collude, cont that such other bidd bidder did not in a communication or count bidder or to fix overl secure any advantage the proposed contract true to the best of Ast or indirectly submit	foregoing proposal or bid; the spire, connive, or agree, directly or person should refrain my manner, directly or inconference with any person, nead, profit, or cost element ge against the Mahoning Vact. Affiant further says that affiant's knowledge and belief this bid, or the contents there or association, or to any age	ectly or indirectly, with any from bidding, or submit a lirectly seek by any agree to fix the bid price of eith of the bid price of not collu- alley Sanitary District, or a all statements contained in af. Affiant further says that eof, or divulge information	bidder or other person, sham bid; further, such ement, or collusion, or ner Affiant or any other de, conspire, or agree to any person interested in the proposal or bid are Affiant did not directly
	-	Elabeth	OF AFFIANT ELIZABETH RYNO MARKETING SPECIALIS
Sworn and subscrib	ped before me this 3	day of DECEMBER	, 20
		SIGNATURE OF NO	TARY PUBLIC
	A Notary Public in and f	PAROLIN	KACHALEPATEL
	My Commission expires		JBLIC OF NEW JERSEY ssion Expires 1/30/2025

[SEAL]

- * Print or type name of Affiant.
- ** Print or type office (president, etc.) of Affiant
- *** Print or type name of firm submitting bid.

BIDDERS MATERIAL QUALITY CERTIFICATION/QUALIFICATION QUESTIONAIRE

The chemical proposed will be manufactured by:	
EAST ST LOUIS, IL	(Name of Manufacturer),(Location of Works), and is
known as HYPER+ION 805	(Brand).
Following is a list of municipal water purification brand proposed has been used successfully in operation: PLEASE SEE ATTACHED	plants in the United States where chemical of the
The full names and residences of all persons and p follows: (Note: For each person, give first and last name in full.	
partnership. In the case of a corporation, give the name Treasurer, and Manager, and state the place of incorpor	s of the President, Secretary,
PLEASE SEE LIST OF DIRECTORS & OFFICERS	
INCORPORATED IN THE STATE OF DELAWARE	
Company Name CHEMTRADE CHEMICALS US LLC	
Signature of Bidder ELIZABETH RYNO, MARKETING SPEC	IALIST
Business Address of Bidder 90 EAST HALSEY ROAD, SUI	TE 200, PARSIPPANY, NJ 07054
*** REMIT ADDRESS: DEPT 771807, PO BOX 77000,	DETROIT, MI 48277-1807
Telephone No.: 800-441-2659 Fed	eral Tax ID: 74-3104940 FOR CONTRACT/BID INFO
SHANNON CLOUGH, CUSTOMER SERVICE REP PURCHASING DEPARTMENT CONTACT	ELIZABETH RYNO, MARKETING SPECIALIST pH: 800-441-2659 / Bids@ChemtradeLogistics.com
844-204-9674 OR cssOrders@ChemtradeLogistics.com	
PHONE NUMBER (FOR ORDERING PRODUCT)	
Dated at PARSIPPANY, NJ the	3 day of DECEMBER , 20 20.
Chemical Contracts - M-571-P - ALUMINUM CHI OPOHVDRATE	POLVMED RIEND 7

BID BOND

KNOW ALL MEN BY THESE PRESE	ENT: That			
Chemtrade Chemicals US LLC	as Principal, hereinafter			
called Bidder, and Berkley Insurance	e Company as			
Surety, hereinafter called Surety, are held and a Ohio, as Obligee, hereinafter called Owner, in the	irmly bound unto The Mahoning Valley Sanitary District, he amount of			
Ten Percent of the Amount Bid for the payment whercof Bidder and Surety successors, and assigns, jointly and severally, fi	Dollars (\$ 10%), bind themselves, their heirs, executors, administrators, rmly by these presents.			
Proposal dated December 8	itted to or is about to submit to the Owner the attached, 2020 for the furnishing and delivery of said unnents referred to in the Proposal, which Proposal is by referred to as the Bid;			
Bidder shall, within ten (10) days of the date of Performance Bond specified in the contract do Valley Sanitary District in accordance with the then this obligation shall be null and void; other amount of this Bid Bond shall be paid to the Owner.	ON OF THIS OBLIGATION is such that, if the of Notice of Award of Contract, deliver to the owner the ocuments, and enter into a contract with The Mahoning terms of said Proposal and the other Contract Documents erwise it shall remain in full force and effect, and the full Owner, not as a penalty, but as stipulated damages to the			
No right of action shall accrue on this B than the Owner named herein or its successors.	ond to or for the use of any person or corporation other			
Dated this 30th day of November , 2	20_20			
and ople	Chemtrade Chemicals US LLC			
Witness	By Elphethan			
Elizabeth Ryno, Marketing Specialist Title				
alutolis	Berkley Insurance Company			
Witness	By Reve Con			
	Renee A. Manny, Attorney-in-Fact Title			
NOTICE: Proof of the authority of the per- Surety shall be attached hereto.	son signing this Bond on behalf of the			

(Acknowledgment of bond by Limited Liability Company)

STATE OF NEW JERSEY)
COUNTY OF MORRIS)

Bond No. CHENM11-30-20-1

On this ST day of DECEMBER, 2020 before me personally came Elizabeth Ryno to me known, being sworn by me, did depose and say that (s)he resides in Raritan, NJ that (s)he is the Marketing Specialist of CHEMTRADE CHEMICALS US LLC a Limited Liability Company described in and which executed the foregoing instrument; that (s)he signed his/her name thereto pursuant to authority granted by Limited Liability Company's Operating Agreement.

Sworn to and acknowledged on the above date,

PARUL N. KACHHIA-PATEL NOTARY PUBLIC OF NEW JERSEY My Commission Expires 1/30/2025

(Acknowledgment of bond by Surety Company)

STATE OF NEW YORK)
COUNTY OF RENSSELAER)

On this 30th day of November, 2020 before me personally came
Renee A. Manny to me known, who being by my duly sworn, did depose and say that
(s) he resides in Rensselaer, NY, (s) he is the Attorney-in fact of the
BERKLEY INSURANCE COMPANY and which executed the within insurument; that (s) he knows
the seal of said Company and that it was affixed thereto by authority of the Power of
Attorney of said Company; of which a certified sopy is attached; and that (s) he
signed said instrument as an Attorney-in-Fact of said Company by like authority.

Sworn to and acknowledged on the above date,

KEVIN J. GARRITY
Notary Public, State of New York
Qualified in Albany County
Reg # 01GA4929025
Commission Expires April 25, 20 2/

POWER OF ATTORNEY BERKLEY INSURANCE COMPANY WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Greenwich, CT, has made, constituted and appointed, and does by these presents make, constitute and appoint: Kevin J. Garrity; Renee A. Manny; Audrey J. Danielsen; Vikki L. LaVean; Lori A. Francett; Christopher Terzian; Judy Tomlinson; John F. Murray, Jr.; Derek P. Hannon; Arnold E. Finaldi, Jr.; or Jennifer Susan Vanat of Rose & Kiernan, Inc. of East Greenbush, NY its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed Fifty Million and 00/100 U.S. Dollars (U.S.\$50,000,000.000), to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on January 25, 2010:

RESOLVED, that, with respect to the Surety business written by Berkley Surety, the Chairman of the Board, Chief Executive Officer, President or any Vice President of the Company, in conjunction with the Secretary or any Assistant Secretary are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and said officers may remove any such attorney-in-fact and revoke any power of attorney previously granted; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued.

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by it corporate seal hereunto affixed this Thomas of April 2020.	s appropriate officers and its
Attest: Berkley Insurance Company	1, 113 13
(Scal) By Ira S. Lederman Executive Vice President & Secretary By Unit. By Unit. Flafter Senior Vice President	fm
WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY	Y PAPER.
STATE OF CONNECTICUT)) ss: COUNTY OF FAIRFIELD)	
Sworn to before me, a Notary Public in the State of Connecticut, this 7th day of April , and Jeffrey M. Hafter who are sworn to me to be the Executive Vice President and Secretary, and respectively, of Berkley Insurance Company. MARIA C RUNDBAKEN NOTARY FURILE	2030, by Ira S. Lederman d the Senior Vice President,

CERTIFICATE

CONNECTICUT

I, the undersigned, Assistant Secretary of BERKLEY INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 30th day of

Vincent P. Forte

Notary Public, State of Connecticut

2020

(Scal)

State of Ohio

Department of Insurance

Certificate of Authority

This is to Certify, that

BERKLEY INSURANCE COMPANY

NAIC No. 32603

is authorized in Ohio to transact the business of insurance as defined in the following section(s) of the Ohio Revised Code:

Section 3929.01 (A)

Aircraft

Allied Lines

Boiler & Machinery

Burglary & Theft

Collectively Renewable A & H

Commercial Auto - Liability

Commercial Auto - No Fault

Commercial Auto - Physical Damage

Credit

Credit Accident & Health

Earthquake

Fidelity

Fire

Glass

Group Accident & Health

Guaranteed Renewable A & H

Inland Marine

Accident & Health

Medical Malpractice

Multiple Peril - Commercial

Multiple Peril - Farmowners

Multiple Peril - Homeowners

Noncancellable A & H

Nonrenew-Stated Reasons (A&H)

Ocean Marine

Other Accident only

Other Liability

Private Passenger Auto - Liability

Private Passenger Auto - No Fault

Private Passenger Auto - Physical Damage

Surety

Workers Compensation

This Certificate of Authority is subject to the laws of the State of Ohio



Mike DeWine, Governor

gilhai Jomes

Jillian Froment, Director

BERKLEY INSURANCE COMPANY

STATUTORY BALANCE SHEET DECEMBER 31, 2019 (AMOUNTS IN THOUSANDS)

Admitted Assets

Bonds Common & Preferred Stocks Cash & Short Term Investments Premiums Receivable Other Assets	\$	9,464,380 4,216,035 828,890 1,771,259 3,613,986
Total Admitted Assets	<u>\$</u>	19,894,550
Liabilities & Surplus		
Loss & LAE Reserves Unearned Premium Reserves Other Liabilities	\$	10,255,713 2,815,353 <u>810,422</u>
Total Liabilities	\$	13,881,488
Common Stock Preferred Stock Additional Paid In Capital Unassigned Surplus	\$	43,000 10 2,914,492 3,055,560
Total Policyholders' Surplus	\$	6,013,062
Total Liabilities & Surplus	<u>\$</u>	19,894,550

Officers:

President: William Robert Berkley, Jr.

Secretary: Ira Seth Lederman Treasurer: Richard Mark Baio

Asst. Treasurer: Bertman Adam Braud, Jr. Asst. Treasurer: Ann Marie Collins Asst. Treasurer: Susan Paula Tingleff

Directors:

William Robert Berkley (Executive Chairman) William Robert Berkley, Jr. Ira Seth Lederman Richard Mark Baio Paul James Hancock

Carol Josephine LaPunzina

James Gerald Shiel

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

as Principal, and
as Surety, are held firmly bound unto The Mahoning Valley Sanitary District, a political sub-division of the ate of Ohio with its principal place of business located at District Plant, Mineral Ridge, Ohio daddress PO Box 4119, Youngstown, Ohio 44515, in the sum of
oney of the United States of America, to be paid to The Mahoning Valley Sanitary District, o its certain attorney, successors or assigns, for which payment, well and truly to be made, wreby bind ourselves, and our several and respective heirs, executors and administrators accessors and assigns, jointly and severally, firmly by these presents.
Sealed with our seals, signed and dated at this
day of, 20
THE CONDITION OF THIS OBLIGATION IS SUCH, THAT WHEREAS, the above
med Principal did on the day of, 20, enter into a contract
th The Mahoning Valley Sanitary District for furnishing the above mentioned chemical which do contract is annexed hereto and is made a part of this bond the same as though set forth
rein.

NOW, THEREFORE, if the above named Principal shall pay to all persons, firms, or corporations, the amounts justly due for performing labor of furnishing equipment, materials and supplies for use in the work under the said contract, and shall satisfy all claims against The Mahoning Valley Sanitary District howsoever originating from any of the operations under the said contract, and shall fully indemnify and save harmless the said District from all cost and damage which it may suffer by reason of the failure of the said principal so to do, and in all other particulars shall well and faithfully do and perform all of the things agreed by him to be done and performed under the said contract according to the terms, covenants and conditions thereof, all and singular, then this obligation shall be void; otherwise it shall remain in full force and effect.

IT IS FURTHER EXPRESSLY AGREED AND UNDERSTOOD by all parties hereto that no modifications, omissions or additions in or to the terms of said contract, or in or to the specifications thereof, shall in any wise affect the obligation of the surety on this bond; and that the liability of said surety for any and all claims hereunder shall in no event exceed the amount of the obligations as herein stated.

Signed, sealed and acknowledged in	the presence of:
ATTEST:	
	(Seal)
	Contractor's Signature
	(Seal)
Witness	Surety

Section 4.0 MVSD Standard Agreement

STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-571-R

FOR FURNISHING

ALUMINUM CHLOROHYDRATE-POLYMER BLEND JANUARY 1, 2021 TO DECEMBER 31, 2021

AGREEMENT

THIS AGREEMENT	made and entered into this _	day of	, 20_, by
and between The Mahoning	Valley Sanitary District, a leg	gally incorporated pol	itical subdivision
of the State of Ohio, with o	offices at District Purification	n and Pumping Plant	, Mineral Ridge,
Ohio, address PO Box 4119,	Youngstown, Ohio 44515,	acting through its Bo	ard of Directors,
duly authorized in the premi-	ses, Party of the First Part, a	nd	
with legal address and princ	ipal place of business at		,
County of	, and State of	hereinafter de	signated as the
Contractor, Party of the Secon	nd Part.		

WITNESSETH: That the parties to these presents, each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise and agree, the Party of the First Part for itself and for its successors and assigns, and the Party of the Second Part for itself and for its heirs, executors, administrators, successors and assigns, as follows:

ARTICLE I. Wherever the words defined in this Article, or pronouns used in their stead, occur in this contract they shall have the meanings here given:

The word "District" shall mean the corporation of The Mahoning Valley Sanitary District, organized and existing under the "Sanitary District Act of Ohio", Sections 6115.01 to 6115.99 inclusive of the Revised Code of Ohio.

The word "Board" shall mean the Board of Directors of The Mahoning Valley Sanitary District, or any agency or officer duly authorized to act for the District in execution of the work required by this contract.

The word "Engineer" shall mean the Chief Engineer of The Mahoning Valley Sanitary District or such other person as may be performing the duties of that position, acting directly or through property authorized agents, such agents acting within the scope of the particular duties entrusted to each.

The word "Contractor" shall mean the Party of the Second Part, heretofore designated, entering into this contract and the legal representatives of said Party, or the Agent appointed to act for said party in the performance of the work.

The word "Contract" shall mean, collectively, all of the covenants, terms and stipulations in these Articles of Agreement and in the five supplementary documents hereto attached which constitute essential parts of the agreement and are hereby made such parts thereof, to wit:

Information and Instructions for bidders
Proposal
Agreement
Bid Bond
Performance Bond
Certificates
Specifications

The word "Specifications" shall mean, collectively, all of the terms and stipulations contained in the "Specifications" appended to this agreement.

ARTICLE II. All work necessary for furnishing and delivering the chemical under this contract shall be done to the satisfaction of the Engineer, who shall in all cases determine the amount, quality, acceptability, and fitness of the chemical which is to be paid for hereunder, and shall decide all questions which may arise as to measurement of quantities, and the fulfillment of the conditions of this contract on the part of the Contractor, and in case any questions shall arise, the resolutions of such questions shall be a condition precedent to the right of the Contractor to receive any money hereunder.

ARTICLE III. The Contractor shall keep the work under his personal control, and shall not assign, transfer, convey, sublet, or otherwise dispose of this contract, or his right, title, or interest in or to the same or any part thereof, without previous consent in writing of the Board, and he shall not assign, by power of attorney or otherwise, any of the moneys to become due and payable under this contract, unless by and with the like consent of the Board; provided, that nothing herein contained shall be construed to hinder, prevent, or affect an assignment by the Contractor for the benefit of his creditors, made pursuant to the Statutes of the State of Ohio.

ARTICLE IV. If the Contractor shall fail to furnish and deliver the chemical as provided by this contract, or shall sublet the contract, or if he shall violate any of the provisions of this contract, the Board may notify the Contractor to discontinue the contract, or any part thereof, as the Board may designate; and thereupon the Contractor shall discontinue such contract, or part thereof, and the District may thereupon by contract or otherwise as it may determine to complete the contract, or such part thereof, and charge the expense thereof to the contract, which expense shall be deducted and paid by the District out of any money then due or to become due to the Contractor under this contract, and in case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference; and in case such expense shall exceed the

latter sum the Contractor, or in case of his default, his surety, shall pay the amount of such excess to the District.

ARTICLE V. The District shall pay and the Contract shall accept as full compensation for everything furnished and done by the Contractor under this contract and for well and faithfully completing the contract, as herein provided, the following price or prices, to wit:

F	or Furnishing ALUMINUM CHLOROHYDRATE-POLYMER BLEND, prepaid f.o.b.
by <i>truck</i> ,	at District Plant, Mineral Ridge, Ohio, the consideration of
	Dollars
(\$) (12-MONTH) FY 2021.
each mor	RTICLE VI. From time to time during the fulfillment of the contract, generally once in th, the District shall pay to the Contractor the amount determined to be due to the r for the chemical furnished hereunder during the preceding month.
If	payment shall be made by the District to the Contractor by the tenth day of the month

The acceptance by the Contractor of any such payment as aforesaid shall operate as and shall be a release to the District, the Board and each member of the Board and its agents, from all claim and liability to the Contractor for anything done or furnished for or relating to the material for which such is made.

following deliver, the unit price shall be reduced by the deduction of ______percent (_____%) thereof, and such unit price so reduced shall be the full compensation to be paid by the

District and accepted by the Contractor for such chemical.

ARTICLE VII. The Contractor's address given in the Proposal is designated as the place to which notices, letters, and other communications to the Contractor shall be mailed or delivered. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or other communication upon the Contractor personally.

IN WITNESS WHEREOF, the parties to this Agreement hereunto set their hands and seals in quadruplicate, the day and year first above written.

THE MAHONING VALLEY SANITARY DISTRICT

(Seal)	BY:_	President, Board of Directors
	BY: _	Attorney for MVSD
ATTEST:		
Secretary, Board of Directors		
VENDOR:		
(Seal)		
ATTEST:		

Section 5.0 Chemical Specifications

STATE OF OHIO THE MAHONING VALLEY SANITARY DISTRICT

CONTRACT NO. M-571

FOR FURNISHING

ALUMINUM CHLOROHYDRATE-POLYMER BLEND

JANUARY 1, 2021 TO DECEMBER 31, 2021

SPECIFICATIONS

SECTION 1. All chemicals furnished under this contract shall be delivered to the District Purification Plant, Mineral Ridge, Ohio, and in compliance with NSF/ANSI 60 and 61: Drinking Water Treatment Chemicals; Drinking Water System Components The Contractor shall prepay all freight charges to the point of delivery.

It is expected that the chemical to be furnished under this contract will be taken by the District at an approximately uniform rate throughout the period of the contract, but the Contractor shall deliver the chemical in such quantities and at such times as may be designated – either in writing, by telephone, or to contractor's agent in person – from time to time, and the contractor shall make delivery, by truck, on the date specified. If contractor is unable to meet above requirements, the District shall be notified by telephone to arrange for alternate date or alternate means of delivery.

SECTION 2. APPROXIMATE QUANTITIES. Following is an approximate statement based upon the estimate of the Engineer of the quantity of chemical to be furnished under this contract for the fiscal year: Annual Quantity 1300 to 1500 Tons.

ALUMINUM CHLOROHYDRATE-POLYMER BLEND: 90-95% ACH, balance being DADMAC polymer

4000 gallon tanker loads

Shall be of the liquid type equal to Aquamark, Inc.'s AQ-702 or approved equal manufacturer and meet the following requirements:

Aluminum %	11.59-12.7%	24-240-24
Specific Gravity	1.29-1.35	
Chloride %	7.2-8.4%	
Al:Cl ratio	1.9:1-2:1.1	
pH	3.5-4.5	
Basicity %	75-85%	
Appearance	clear to slightly hazy	

SECTION 3. The product must be acceptable for use in potable water supplies and shall meet the requirements of AWWA B403-3 Standard and be NSF 60 or 61 approved. Proof of acceptance and certification must be furnished with the bid proposal. The Vendor must provide a spectral analysis of the products submitted with the bid.

SECTION 4. The product must be blended with 5%, 40% Polydiallyldimethyl Ammonium Chloride. In the class called quaternary amines. (polyDADMAC) DADMAC polymer.

The ACH shall be manufactured from virgin aluminum ingots.

SECTION 5. The product must have a demonstrated ability to perform effectively in all turbidity, temperature, TOC removal, and pH ranges for the water being treated at the Meander Water Facility.

Arrangements for conducting demonstrations are the responsibility of the Bidder and must be made far enough in advance of the bid to show effectiveness of the product. The demonstrations must include the following:

- a) Demonstrate an ability to perform equivalently, or better, than the current coagulant, in jar tests on at least 4 sets of test. The jar test procedure will be established by the facility. A one (1) gallon sample of the product must be provided to the District.
- b) Enough product for plant testing, 14 days long, must be provided. The product must be fed continuously for the duration of the plant trial and must perform equivalently to the current coagulant.
- c) Effective performance shall be determined by the Water Treatment Operating Staff based upon current water quality objectives including applied turbidity, finished water turbidity, filter run time, product dosage alkali required for pH adjustment, TOC reduction, and TOC removal. (No compensation will be made to the Vendor if the product does not meet or exceed plant water quality performance objectives.)

SECTION 6. Supplier shall supply the names of contacts of three (3) drinking water treatment plants that are using a product comparable to what is being bid for reference.

SECTION 7. The vendor's representative shall conduct jar tests to determine optimum product dosages as long as the vendor's product is being applied, as requested by the facility.

SECTION 8. The product must be manufactured in the United States.

SECTION 9. The product should be bid in wet pounds.

SECTION 10. The chemical to be furnished under this contract shall be produced by the manufacturer and at the works stated in the proposal, and the contract shall not change the manufacturer or location of production of the chemical without the previous consent in writing of the Board.

SECTION 11. If any lot of material as delivered be found to fail to comply with the requirements of these specifications, it shall be rejected and shall be removed by the Contractor at his expense, and any cost which may have been incurred by the District in connection with the unloading and reloading of the material shall be deducted from the amount payable to the Contractor under this contract.

SECTION 12. All chemicals, materials, or substances furnished shall conform with American National Standards Institute/National Sanitation Foundation Standard 60 and AWWA Standard B-310-06 for Water Treatment. *Documentation shall be submitted with Bid Proposal*.

SECTION 13. As part of the alternate bid the Contractor shall provide chemical safety training to the employees of The Mahoning Valley Sanitary District. The Chemical Safety Training shall consist of course work addressing Chemical and Physical properties of the Chemical, the safe handling and feeding and any emergency training associated with the usage and storage of the chemical.

SUPPLIER MUST BE COMPLIANT WITH THE GHS - OSHA PROGRAM SUPPLYING PROPER LABELS AND SDS SHEETS.



DELEGATION OF AUTHORITY

I, Mark Davis, President and Chief Executive Officer 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

Ann Hopler

Andrew Hoffman

Michele Schroeher

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

Dated as of the 31st day of January, 2016.

President and Chief Executive Officer

CERTIFICATE OF SECRETARY

l, Susan Paré, 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 Mark Davis is the duly elected President and Chief Executive Officer of Chemtrade and holds such offices on the date hereof, that Mr. Davis, 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.

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 31st day of January, 2016.

Seal

Corporate Secretary

Chemtrade Chemicals US LLC

Managers		Address
Mark Davis		155 Gordon Baker Road, Suite 300, Toronto, Ontario, Canada M2H 3N5
Joe Jayroe		90 East Halsey Road, Parsippany, New Jersey 07054
Leon Aarts		90 East Halsey Road, Parsippany, New Jersey 07054
<u>Officers</u>	Position	Address
Mark Davis	President and Chief Executive Officer	155 Gordon Baker Road, Suite 300, Toronto, Ontario, Canada M2H 3N5
Rohit Bhardwaj	Treasurer and Chief Financial Officer	155 Gordon Baker Road, Suite 300, Toronto, Ontario, Canada M2H 3N5
Leon Aarts	Vice-President	90 East Halsey Road, Parsippany, New Jersey 07054
Susan Paré	Corporate Secretary	155 Gordon Baker Road, Suite 300, Toronto, Ontario, Canada M2H 3N5
Joe Jayroe	Director, Manufacturing	90 East Halsey Road, Parsippany, New Jersey 07054
Joseph F. Leary	Assistant Treasurer	90 East Halsey Road, Parsippany, New Jersey 07054



Water Chemicals Group

90 East Halsey Road Parsippany, NJ 07054 Tel: 800-441-2659 Fax: 973-515-4461 www.ChemtradeLogistics.com

REFERENCES

The following is a list of 3 customers Chemtrade currently supplies with ACH and/or Aluminum Sulfate for the 2019 and 2020 calendar years (and prior). If more specific information is needed please contact our office at 1-800-441-2659.

City of Branson 110 W. Maddux Street Branson, MO 65610 Contact: David D. Rockhill

Buyer

Phone: 417-334-3345

Email: drockhill@bransonmo.gov

City of Mansfield 1200 E. Broad Street Mansfield, TX 76063 Contact: David Hinshaw

Plant Manager Phone: 817-728-3675

Email: david.hinshaw@mansfieldtexas.gov

Brownsville Public Utilities Board 1495 Robinhood Drive Brownsville, TX 78521 Contact: Diane Solitaire Purchasing Agent Phone: 956-983-6366

Email: Dsolitaire@brownsville-pub.com



To:

MAHONING VALLEY

CC:

Beth Ryno

Lab. Log#

0022706

SAMPLES:

Hyper+Ion 805

ORIGIN:

East St Louis

All analyses are reported as PPM unless stated otherwise

PARAMETER	Concentration	PARAMETER	Concentration
As	<2	% Al2O3 (total by wt)	22.0
Ва	<1		
Ве	<1		
Ca	66		
Cd	<1		
Co	<1	Turbidity (NTU)	12.5
Сг	<1	Appearance	clear / water white
Cu	<1		
Fe	92		
Hg	<0.5		
K	10		
Mg	26		
Mn	1		
Мо	<1		
Na	98		
Ni	<1		
Р	4		
Pb	<1.5		
Sb	<1.5		
Se	<1		
Si	52		
Sn	<1		
Sr	<1		
Ti	5		
TI	<1.5		
V	8		
Zn	2		
Zr	<1		

NOTES:

Product within specification for all parameters analyzed.

ID 0022706 - ACH base product trace elements

Analysts

Record

Stephanie Ulman Andrew Carr

TCESL06/160 43917.443 Report Date 4/28/2020 BR 10/16/2020

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.



Water Treatment Group

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

PRODUCT CERTIFICATION

Chemtrade Chemicals certifies that all grades of Hyper⁺Ion[®] (Liquid Polyaluminum Chloride) as produced by our manufacturing locations will meet National Sanitation Foundation Standard 60 and ANSI/AWWA B 408-18 standard in every respect.

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

Elizabeth Ryno

Marketing Specialist



Hyper+Ion® 805 PRODUCT DATA SHEET

CHARACTERISTICS

Hyper*lon® 805 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: C.A.S. Polyaluminum hydroxychloride mixture

1327-41-9 (Polyaluminum hydroxychloride)

pH (neat) 2 - 5
Specific Gravity @ 21°C (70°F) 1.30 - 1.33
Freezing Point (approx.) -5°C (23°F)
Density, lbs./gal., US 10.8 - 11.1
Aluminum as Al, % 11.3 - 12.1
Aluminum as Al₂O₃, % 21.3 - 22.8
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-6301P

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 metter, including, without limitation, that the practice or application of any such information is free of patent infringement or other ymmisperprepriation. Chemitrade Logistics fitness, and its affiliates (collectively, "Chemitrade") are not engaged in the business of providing technical, operational, engineering or safety information for a fee, and, therefore, any such information provided herein is intended for use by persons having requisite knowledge, skill and experience in the chemical industry. Chemitrade shell 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.

CHEMTRADE

Hyper+Ion® 805

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: 10/01/2015

Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Hyper+Ion® 805 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



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

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	30 - 60	Eye Irrit. 2A, H319	
Quaternary Ammonium Polymer**	(CAS-No.) Proprietary	1-5	Aquatic Chronic 3, H412	

Full text of H-phrases: see section 16

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.

05/31/2017 EN (English US) SDS#: CHE-6301S 2/8

^{*}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].

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. Alkalis. 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.

05/31/2017 EN (English US) SDS#: CHE-6301S 3/8

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.

Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Colorless to amber colored

Odor Threshold : Not available

Odor Threshold : Not available

pH : 2-5

Not available **Evaporation Rate Melting Point** < -1 °C (30.2 °F) Not available **Freezing Point 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 Not available **Vapor Pressure** Not available Relative Vapor Density at 20°C **Relative Density** Not available **Specific Gravity** : 1.10 - 1.35 100% Solubility **Partition Coefficient: N-Octanol/Water** Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under normal conditions.

<u>Possibility of Hazardous Reactions</u>: Hazardous polymerization will not occur. <u>Conditions to Avoid</u>: 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

Viscosity

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+lon® 805

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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+lon® 805		
Persistence and Degradability	Not established.	

Bioaccumulative Potential

Hyper+lon® 805		
Bioaccumulative Potential	Not established.	2.7

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

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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+lon® 805	
Immediate (acute) health hazard	

US TSCA Flags

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

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US State Regulations

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity		
Quaternary Ammonium No Polymer		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 PDSCL	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

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16	Data modified	05/31/2017
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

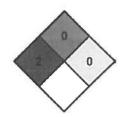
temporary incapacitation or residual injury.

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

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IMDG - International Maritime Dangerous Goods Code

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 StatesToxic Substances Control Act

TWA - Time Weighted Average

WEEL - Workplace Environmental Exposure Levels

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INSQ - Mexican National Inventory of Chemical Substances

ISHL - Japan Industrial Safety and Health Law

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™.



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The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Monday, November 23, 2020** at 12:15 a.m. Eastern Time. Please <u>contact NSF</u> 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=805&

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

Chemtrade Solutions LLC

1008 Cedar Lake Road Southeast
Decatur, AL 35603
United States
800-272-1055
256-350-6133
Visit this company's website
(http://www.chemtradelogistics.com/main/)

Facility: Decatur, AL

Polymer Blends[AL] [PY]

Trade Designation

Product Function

Max Use

Hyper+Ion® 805

Coagulation & Flocculation

250mg/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.

Chemtrade Solutions LLC (formerly General Chemical LLC)

1421 Willis Avenue Syracuse, NY 13204 **United States** 315-478-2323 Visit this company's website (http://www.chemtradelogistics.com/main/)

Facility: Pittsburg, CA

Polymer Blends[AL] [PY]

Trade Designation Hyper+Ion® 805

Product Function Coagulation & Flocculation Max Use 250mg/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® 805[AL] [PY] **Product Function** Coagulation & Flocculation Max Use 250mg/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: Terrell, TX

Polymer Blends[AL] [PY]

Trade Designation Hyper+Ion® 805

Product Function

Coagulation & Flocculation

Max Use

250mg/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 4 Processing time was 1 seconds