

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 15708-41-5
Product Name: Iron EDTA
Revision Date: Jan 12, 2021 **Date Printed:** Jan 19, 2021
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Not a hazardous substance or mixture according to GHS (Globally Harmonized System).

Pictograms

None

Signal Word

No signal word available.

Acute toxicity of 100% of the mixture is unknown

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0015708-41-5	Ferrate(1-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium (1:1), (OC-6-21)-	100%

SECTION 4) FIRST-AID MEASURES**Inhalation**

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

Eye Contact

Flush eyes with water as a precaution.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth. Never give anything through mouth to an unconscious person. Call a POISON Center or doctor if you feel unwell.

Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

This material is not combustible. Use extinguishing media based on surrounding materials.

Unsuitable Extinguishing Media

No data available.

Specific Hazards in Case of Fire

Non-flammable.

On burning: release of carbon monoxide-carbon dioxide. Nitrogen oxides. Iron oxide

Fire-fighting Procedures

Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water. Prevent fire-fighting water from entering environment.

Special Protective Actions

Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

5.3 Advice for firefighters

Firefighters should wear NIOSH/MSHA approved self-contained, breathing apparatus and full protective clothing

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Avoid dust formation.

Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Recommended Equipment

Wear chemical protective clothing.

Personal Precautions

Do not get in eyes, on skin or on clothing.

Environmental Precautions

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Prevent the influx to waterways, sewers, basements or confined spaces.

Take up mechanically(sweeping, shovelling) and collect in suitable container for disposal. Disposal must be done according to official regulations.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Do not get in eyes, on skin or on clothing. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Eyewash stations and showers should be available in areas where this material is used and stored

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits.

Storage Room Requirements

Store protected from moisture.

Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Store in original containers. Keep containers securely sealed.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear safety glasses with side shields

Skin Protection

Use chemical resistant gloves when skin contact could occur. Gauntlet-type gloves may be required if forearm contact could occur. Examples of acceptable glove materials include: viton, natural rubber, polyvinyl chloride, nitrile rubber. Glove suitability and breakthrough time will differ depending on specific use conditions.

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

Respiratory protection should be worn when there is a potential to exceed the exposure limits or when adverse effects, such as respiratory irritation or discomfort are experienced. Depending upon the airborne exposure, the following types of air-purifying respirators are recommended: NIOSH-approved supplied air respirator operated in positive pressure mode or a NIOSH-approved supplied air respirator.

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Sodium Feredetate (15708-41-5)

DNEL/DMEL(Workers)

Acute - systemic effects, inhalation: 74 mg/m³

Acute- local effects, inhalation: 74mg/m³

Long term- systemic effects, dermal: 4200 mg/kg bodyweight/day

Long term- systemic effects, inhalation 2 mg/m³

DNEL/DMEL (General population)

Long term- systemic effects, oral: 0.42 mg/kg bodyweight/day

Long term- systemic effects, inhalation: 05. mg/m³

Long term systemic effects, dermal: 2100 mg/kg bodyweight/day mg/l

PNEC (Water)

PNEC Aqua(freshwater): 3.01 mg/l

PNEC Aqua(marine water): mg/l

PNEC aqua (intermittent, freshwater);

Maintain air concentrations below occupational exposure levels and flammable limits. Use local explosion-proof exhaust ventilation for operations stoat produce a mist, vapour or fume.

8.2 Exposure Controls

An emergency eye wash must be readily accessible to the work area.

Chemical Name	CANsmg	CANspmm	CANtmg	CANtppm	OSHA STEL (mg/m ³)	OSHA STEL (ppm)	OSHA TWA (mg/m ³)	OSHA TWA (ppm)
No applicable chemical	-	-	-	-	-	-	-	-

Chemical Name	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	ACGIH STEL (mg/m ³)	ACGIH STEL (ppm)	ACGIH TWA (mg/m ³)	ACGIH TWA (ppm)	ACGIH TLV Basis

No applicable chemical	-	-	-	-	-	-	-	-
------------------------	---	---	---	---	---	---	---	---

Chemical Name	ACGIH Carcinogen	ACGIH Notations
No applicable chemical	-	-

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	8.35 lb/gal
Specific Gravity	1.00
<hr/>	
Appearance	Yellow-brown crystalline solid
Odor Description	Odourless
Odor Threshold	N/A
pH	N/A
Melting/Freezing Point	Decomposes before melting (OECD 102 method)
Low Boiling Point	N/A
High Boiling Point	N/A
Flash Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Evaporation Rate	N/A
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	N/A
Coefficient Water/Oil	N/A
Viscosity	N/A

SECTION 10) STABILITY AND REACTIVITY

Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Stability

Stable under normal storage and handling conditions.

10.1 Reactivity

Conditions to Avoid

No data available

Hazardous Reactions/Polymerization

Under normal conditions of storage and use, hazardous polymerization will not occur. Violent explosion may occur when chlorinating xylene with 1,3-dichloro-5,5-dimethyl-2, 4-imidazolidindione (dichlorohydrantoin). The haloimide undergoes immediate self accelerating decomposition.

Hazardous polymerization will not occur.

Incompatible Materials

Aluminium. Strong oxidizing agent

Strong oxidizing agents

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, toxic fumes.

SECTION 11) TOXICOLOGICAL INFORMATION**Likely Route of Exposure**

Inhalation, ingestion, skin absorption

Acute Toxicity

LD50 (Oral rat): >2000 mg/kg bodyweight (OECD 423 method)

LD50 dermal rat: > 2000 mg/kg bodyweight (OECD 402 method)

LC50 inhalation rat (Dust/Mist-mg/l/4h (OECD 403 method); > 2.75 mg/l/4h (OECD 403 method)

Based on available data, the classification criteria are not met.

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation

Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

SECTION 12) ECOLOGICAL INFORMATION**Bioaccumulative Potential**

Partition coefficient n-octanol/ water (Log Pow): -8.841 (Calculation method)

Bioaccumulation unlikely

Toxicity

Sodium Feredatate (15708-41-5):
 LC50 Fish: > 100 mg/l (96h, Oncorhynchus mykiss (Rainbow trout)(OECD 203 method))
 EC50 Daphnia: 100.9 mg/l (48h; Daphnia magna; (OECD 201 method))
 ErC50 (ALGAE):>60 MG/L (72H; Pseudokirchneriella subcapitata; (OECD 201 method))
 NOEC Chronic fish: > 25.7 mg/l (35d; Danio rerio' (OECD 210 METHOD))
 NOEC chronic crustacea: 25 mg/l (21 d: Daphnia magna; ECC Guideline XI/681/86, Draft 4
 NOEC chronic algae: 48.4 mg/l (72 h; Pseudokirchneriella subcapitata; OECD 201 method))

Mobility in Soil

Product adsorbs little onto the soil

Persistence and Degradability

Not readily biodegradable.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Waste management should be in full compliance with federal, state and local laws.

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

	Transport Canada Information	U.S. DOT Information
UN number:	Not Regulated	Not Regulated
Proper shipping name:	N/A	N/A
Hazard class:	Not Applicable	Not Applicable
Packaging group:	Not Applicable	Not Applicable
Hazardous substance (RQ):		No Data Available
Marine Pollutant:	No Data Available	No Data Available
Note / Special Provision:	No Data Available	No Data Available
Toxic-Inhalation Hazard:		No Data Available
Transport in bulk (according to Annex II of MARPOL 73/78):	No Data Available	

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0015708-41-5	Ferrate(1-), [[N,N'-1,2-ethanediy]bis [N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4)]-, sodium (1:1), (OC-6-21)-	100%	DSL,TSCA,EU_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.0:

Revision Date: Jan 12, 2021
First Edition.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.