

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 14025-21-9
Product Name: Zinc EDTA
Revision Date: Jan 12, 2021 **Date Printed:** Oct 12, 2021
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
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Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

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

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0014025-21-9	ZINCATE(2-), [[N,N'-1,2-ETHANEDIYLBIS[N-[(CARBOXY-.KAPPA.O)METHYL]GLYCINATO-.KAPPA.N.,KAPPA.O]](4-)]-, SODIUM (1:2), (OC-6-21)-	0% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell or are concerned.

Eye Contact

If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.

Skin Contact

Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Ingestion

Call a poison center or a doctor if you feel unwell. Induce vomiting if person is conscious. Drink plenty of water. Rinse mouth. If you feel unwell/If concerned: Get medical advice/attention.

Ingestion

Call a poison center or a doctor if you feel unwell. Induce vomiting if person is conscious. Drink plenty of water.

Most Important Symptoms and Effects, Both Acute and Delayed

Irritation of eyes and mucous membrane.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

The product is not flammable. Use extinguishing media appropriate for surrounding fire. Foam, powder, carbon dioxide (CO₂), water spray. Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Large Fire: Dry chemical, CO₂, alcohol resistant foam or water spray Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Unsuitable Extinguishing Media

Do not use water jet.

Specific Hazards in Case of Fire

Toxic fumes may be released. Nitrogen oxides. Carbon dioxide (CO₂). Carbon monoxide. Metal oxides. Dense smoke may be generated while burning.

Fire-fighting Procedures

Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray is recommended to cool or protect exposed materials or structures. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

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

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Do not touch or walk through spilled material. Ventilate closed spaces before entering.

Recommended Equipment

See section 8 for specifics on protective personal equipment (PPE).

Personal Precautions

Avoid breathing vapor or mist. Do not touch damaged containers or spilled materials unless wearing appropriate protective 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

Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Disposal must be done according to official regulations. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

SECTION 7) HANDLING AND STORAGE

General

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Use good personal hygiene practices. Wash hands after use.

Ventilation Requirements

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

Storage Room Requirements

Store in cool, dry, well-ventilated areas away from heat, direct sunlight and strong oxidizers. Keep container(s) tightly closed and properly labeled. Containers that have been opened must be carefully resealed to prevent leakage.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

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

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

8.2 Exposure Controls

Maximum airborne concentrations at the workplace:
Aerosol- Respirable fraction - AGW:10.0 mg/m

The aerosol limit specified is a recommendation should aerosol be formed during processing.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "CAN_AL_Carcinogen", "CAN_AL_Notation", "CAN_ALsmg", "CAN_ALsppm", "CAN_ALtmg", "CAN_ALtppm", "CAN_ONsmg", "CAN_ONsppm", "CAN_ONtmg", "CAN_ONtppm", "CAN_QCVECDmg - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_mg", "CAN_QCVECDppm - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_ppm", "CAN_QCVEMPmg - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_mg", "CAN_QCVEMPppm - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_ppm", "CANsmg", "CANsppm", "CANtmg", "CANtppm", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHASppm", "OSHAtmg", "OSHAtppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Density	8.35 lb/gal
Specific Gravity	1.00
Appearance	Granulate white
Odor Description	Odourless
Odor Threshold	N/A
pH	6 – 7 (1 %ig)
Melting/Freezing Point	N/A
Low Boiling Point	N/A
High Boiling Point	N/A
Flash Point	315.00 °C
Vapor Pressure	≈ 0 Pa (25 °C; Calculation method)
Vapor Density	N/A
Evaporation Rate	N/A

Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	Water: > 534 g/l (0 °C; (OECD 105 method))
Coefficient Water/Oil	-10.32
Viscosity	N/A

SECTION 10) STABILITY AND REACTIVITY

Possibility of hazardous reactions

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

Reactivity

The product is stable under normal conditions.

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

No additional information available Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

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. No data available.

Incompatible Materials

Aluminium. Strong oxidizing agent Strong bases, acids, and 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. Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral (rat): \geq 2000 mg/kg bodyweight(OECD 423)

LD50 Dermal (rat): \geq 2000 mg/kg bodyweight(OECD 402); Read across EDTA-Fe (NH₄)(NH₄OH)

LC50 Inhalation (rat): > 5.16 mg/l/4h(OECD 436); Read across EDTA-MnNa₂

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

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

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

May be slightly irritating to skin and eyes. PH: 6-7 (1% ig)

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.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

SECTION 12) ECOLOGICAL INFORMATION**Toxicity**

LC50 Fish: 685 mg/l (96h; Lepomis macrochirus)

EC50 Daphnia: 100.9 mg/l (48h; Daphnia magna (OECD 202 method); Read across FeNaEDTA)

ErC50 Algae: 649.3 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method); Read-across MnNa2-EDTA)

NOEC Chronic fish: \geq 25.7 mg/l (35d; Danio rerio; (OECD 210 method); Read-across CaNa2EDTA)

NOEC Chronic crustacea: \geq 25 mg/l (21d; Daphnia magna; Read-across EDTA-H2Na2)

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

Mobility in Soil

No data available.

Bioaccumulative Potential

Partition coefficient n-octanol/water (Log Pow): -10.316

Persistence and Degradability

Inherently biodegradable

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

This substance/ mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 13) DISPOSAL CONSIDERATIONS**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, state and local laws.

SECTION 14) TRANSPORT INFORMATION

Transport Canada Information

Not regulated

U.S. DOT Information

Not regulated

IMDG Information

Not Regulated

IATA Information

Not Regulated

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0014025-21-9	ZINCATE(2-), [[N,N'-1,2-ETHANEDIYLBIS[N-[(CARBOXY-.KAPPA.O)METHYL]GLYCINATO-.KAPPA.N.,KAPPA.O]](4-)-], SODIUM (1:2), (OC-6-21)-	0% - 100%	DSL,TSCA,AICS,CN_IECSC - Inventory of Existing Chemical Substances Produced or Imported in China,EU_EINECS - European_EC_Inventory_EINECS,EU_EC_Inventory - European_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; 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 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

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