THAMES RIVER CHEMICAL

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

| CAS Number: | $51981-21-6$ |  |  |
| :--- | :--- | :--- | :--- |
| Product Name: | Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate: (GLDA) |  |  |
| Revision Date: | Mar 03, 2020 | Date Printed: 1.0 | Mar 04, 2020 |
| Version: | 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

Serious Eye Damage - Category 1
Skin Corrosion - Category 1A

## Pictograms



Signal Word
Danger
Hazard Statements - Health
Causes severe skin burns and eye damage
Precautionary Statements - General
If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Precautionary Statements - Prevention
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash/Wash hands thoroughly after handling.
Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
Rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Specific treatment (see first-aid on the SDS).
Precautionary Statements - Storage
Store locked up.
Precautionary Statements - Disposal
Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.
Physical Hazards Not Otherwise Classified
No data available.
Health Hazards Not Otherwise Classified
No data available.
Acute toxicity of $40 \%$ of the mixture is unknown

## SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

| CAS | Chemical Name | \% By Weight |
| :--- | :--- | :--- |
| 0051981-21-6 | Tetrasodium salt of glutamic acid N,N-diacetic acid | $38 \%-47 \%$ |

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
Get medical advice/attention if you feel unwell or are concerned. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. Remove source of exposure or move person to fresh air and keep comfortable for breathing.

## Eye Contact

Immediately call a POISON CENTER/doctor. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face.

## Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash contaminated clothing before reuse. Immediately call a POISON CENTER/doctor. Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available.

Ingestion
Rinse mouth. Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.
Most Important Symptoms and Effects, Both Acute and Delayed
No data available.
Indication of Any Immediate Medical Attention and Special Treatment Needed
No data available.

## SECTION 5) FIRE-FIGHTING MEASURES

## Suitable Extinguishing Media

Dry chemical, CO2, water spray or regular foam
Unsuitable Extinguishing Media
Do not use straight stream of water.

## Specific Hazards in Case of Fire

Thermal decomposition can lead to release of irritating and toxic gases and vapors

## Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely. Cool containers with flooding quantities of water until well after fire is out.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Large Fire: Dike fire-control water for later disposal; do not scatter the material

## 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.

## SECTION 6) ACCIDENTAL RELEASE MEASURES

## Emergency Procedure

Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Evacuate and isolate hazard area and keep unauthorized personnel away.

## Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA). Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).

## Personal Precautions

DO NOT get on skin, eyes or clothing. Avoid breathing vapor or mist.

## Environmental Precautions

Stop spill/release if it can be done safely. 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

Ventilate area after clean-up is complete. Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal.

## SECTION 7) HANDLING AND STORAGE

## General

Wash hands after use. Do not get in eyes, on skin or on clothing. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. 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. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

## Storage Room Requirements

Store in original containers. Keep containers securely sealed. Keep containers securely sealed when not in use. Protect containers against banging or other physical damage when storing, transferring, or using them. Segregate from other hazard classes and store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Provide secondary containment for toxic materials. Store, handle, and use corrosive materials in well-ventilated areas.

## SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

## Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

## 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. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use 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.

| Chemical Name | CANsmg | CANsppm | CANtmg | CANtppm | OSHA STEL ( $\mathrm{mg} / \mathrm{m} 3$ ) | OSHA STEL (ppm) | OSHA TWA (mg/m3) | OSHA TWA (ppm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No applicable chemical | - | - | - | - | - | - | - | - |
| Chemical Name | OSHA Carcinogen | OSHA Tables (Z1, Z2, Z3) | OSHA Skin designation | ACGIH STEL (mg/m3) | ACGIH STEL (ppm) | ACGIH TWA (mg/m3) | ACGIH TWA (ppm) | ACGIH <br> TLV Basis |
| No applicable chemical | - | - | - | - | - | - | - | - |
| Chemical Name | ACGIH Carcinogen | ACGIH <br> Notations |  |  |  |  |  |  |
| No applicable chemical | - | - |  |  |  |  |  |  |

## SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

| Density | 11.52 lb/gal |
| :--- | :--- |
| Specific Gravity | 1.38 |
| Appearance | liquid |
| Odor Description | slight ammonia odor |
| Odor Threshold | N/A |
| pH | N/A |
| Melting/Freezing Point | $>280^{\circ} \mathrm{C}$ |
| Low Boiling Point | No Data Available |
| High Boiling Point | N/A |
| Flash Point | No Data Available |
| Vapor Pressure | No Data Available |
| Vapor Density | N/A |
| Evaporation Rate | No Data Available |
| Upper Explosion Level | N/A |
| Lower Explosion Level | N/A |
| Water Solubility | No Data Available |
| Coefficient Water/Oil | log Pow $=-11.95$ |
| Viscosity | No Data Available |
|  |  |

## SECTION 10) STABILITY AND REACTIVITY

## Reactivity

No data available.
Stability
Stable under normal storage and handling conditions.
Conditions to Avoid
High heat
Hazardous Reactions/Polymerization

Hazardous polymerization will not occur.
Incompatible Materials
Strong oxidizing agents; strong acids; strong bases
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx)

## SECTION 11) TOXICOLOGICAL INFORMATION

## Likely Route of Exposure

Inhalation, ingestion, skin absorption

## Acute Toxicity

LD50, oral, > $2000 \mathrm{mg} / \mathrm{kg}$ bw(rat)
LD50, dermal, > 2000 mg/kg bw(rat)

## Aspiration Hazard

No data available.
Carcinogenicity
No data available.
Germ Cell Mutagenicity
No data available.
Reproductive Toxicity
No data available.
Respiratory/Skin Sensitization
No data available.

## Serious Eye Damage/Irritation

Causes serious eye damage

## Skin Corrosion/Irritation

Causes severe skin burns and eye damage
Specific Target Organ Toxicity - Repeated Exposure
No data available.
Specific Target Organ Toxicity - Single Exposure
No data available.
Likely Routes of Exposure
Inhalation, Ingestion, Skin contact, Eye contact

## SECTION 12) ECOLOGICAL INFORMATION

## Bioaccumulative Potential

This substance is not considered to be persistent or bioaccumulating
Toxicity
no data available
Mobility in Soil
No data available
Bio-accumulative Potential
No data available.
Persistence and Degradability
This substance is not considered to be persistent or bioaccumulating
Other Adverse Effects

## SECTION 13) DISPOSAL CONSIDERATIONS

## Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. 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 <br> Information | U.S. DOT <br> Information |
| :--- | :--- | :--- |
| UN number: | UN3267 | UN3267 |
| Proper shipping <br> name: | Corrosive liquid, <br> basic, organic, n.o.s. <br> (Tetrasodium N,N-bis <br> (carboxylatomethyl)- <br> L-glutamate (GLDA- <br> 4NA)) | Corrosive liquid, <br> basic, organic, n.o.s. <br> (Tetrasodium N,N-bis <br> (carboxylatomethyl)- <br> L-glutamate (GLDA- <br> 4NA)) |
| Hazard class: | 8 | 8 |
| Packaging group: | I | I |
| Hazardous <br> substance (RQ): |  | No Data Available |
| Marine Pollutant: | No Data Available | No Data Available |
| Note / Special <br> Provision: | Note / Special <br> Provision | No Data Available |
| Toxic-Inhalation <br> Hazard: |  | No Data Available |
| Transport in bulk <br> (according to <br> Annex II of <br> MARPOL 73/78): | No Data Available |  |

## SECTION 15) REGULATORY INFORMATION

| CAS | Chemical Name | \% By Weight | Regulation List |
| :---: | :---: | :---: | :---: |
| 0051981-21-6 | Tetrasodium salt of glutamic acid <br> N,N-diacetic acid | $38 \%-47 \%$ | DSL,TSCA,EU_EC_Inventory |

## SECTION 16) OTHER INFORMATION

## Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CANsmg or CANsppm - 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.

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