SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 5064-31-3, 1310-73-2,2836-32-0

Product Name: Methyl glycine diacetic acid(MGDA 39%)

Revision Date: May 11, 2022 **Date Printed:** May 12, 2022

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

Corrosive to metals - Category 1

Pictograms

Signal Word

Warning

Hazardous Statements - Physical

H290 - May be corrosive to metals

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P234 - Keep only in original packaging.

Precautionary Statements - Response

P390 - Absorb spillage to prevent material damage.

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

No precautionary statement available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

S3 Automated Statements

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

CAS	Chemical Name	% By Weight
0001310-73-2	SODIUM HYDROXIDE	1% - 1%
0002836-32-0	ACETIC ACID, 2-HYDROXY-, SODIUM SALT (1:1)	1% - 1%
0005064-31-3	NITRILOTRIACETIC ACID, TRISODIUM SALT	0% - 0%

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

Move person to fresh air and keep comfortable for breathing; consult a physician.

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact

Wash contact areas with soap and water.

Ingestion

Give several small portions of water to drink. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog, dry chemical, carbon dioxide.

Specific Hazards in Case of Fire

In case of fire, hazardous decomposition products may include carbon oxides. Carbon oxides, Nitrogen oxides (NOx)

Fire-fighting Procedures

Self-contained breathing apparatus with full face piece operated in positive pressure mode. Full protective clothing must be worn in case of fire.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental Precautions

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations. For large amounts: Pump off product. Spills should be contained, solidified, and placed in suitable containers for disposal.

SECTION 7) HANDLING AND STORAGE

General

Keep container tightly closed. Protect from the effects of light. Protection against fire and explosion: No special precautions necessary.

Storage Room Requirements

Do not heat above 50°C Segregate from alkalies and alkalizing substances

Suitable materials for containers: Stainless steel 1.4571, Stainless steel 1.4404, High density polyethylene (HDPE), low density polyethylene (LDPE), glass, HDPE fluorinated

Storage temperature: < 30C
Storage duration: <= 24 months

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. 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.

Respiratory protection

Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen
content of 19.5% by volume under normal atmospheric
pressure. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or
other circumstances where air-purifying respirators may not provide adequate protection.

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	CAN_ONsmg	CAN_ONtmg	CAN_ONsppm	CAN_ONtppm	CAN_QCVEMPppm - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_ppm	CAN_QCVEMPmg - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_mg	CAN_QCVECDppm - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_ppm	CAN_QCVECDmg - CANADA_QUEBEC VALEUR D''EXPOSITION DE COURTE DURÉE_mg
SODIUM HYDROXIDE								P2

Chemical Name	CAN_ALtppm	CAN_ALtmg	CAN_ALsmg	CAN_AL_Notation	CAN_AL_Carcinogen	CAN_ALsppm	CANsmg	CANsppm
SODIUM HYDROXIDE			(c) 2	3: Occupational exposure limit is based on				

				irritation effects and its adjustment to compensate for unusual work schedules is not required.				

Chemical Name	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)
SODIUM HYDROXIDE					2			1

Chemical Name	OSHA Skin designation	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
SODIUM HYDROXIDE		C 2				URT, eye, & skin irr		

(C) - Ceiling limit, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Density	1.33 g/cm3
Specific Gravity	1.33

Flash Point	A flash point determination is unnecessary due to the high water content.
Coefficient Water/Oil	N/A
Water Solubility	Soluble in water
Viscosity	25mPa.s(23 °C)
Appearance	Liquid yellow
pH	11.00
Odor Threshold	Not determined
Odor Description	Product specific
Upper Explosion Level	For liquids not relevant for classification and labelling
Lower Explosion Level	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Vapor Pressure	23.40 hPa
Vapor Density	1.33 g/cm3
Melting/Freezing Point	N/A
High Boiling Point	N/A
Low Boiling Point	100.00 °C
Evaporation Rate	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents. Corrosive in contact with metals.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

General

Keep container tightly closed. Protect from the effects of light. Protection against fire and explosion: No special precautions necessary.

Acute Toxicity

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

0001310-73-2 SODIUM HYDROXIDE

Dust may cause damage to upper respiratory tract and lung itself, producing from mild nose irritation to pneumonitis. severe damage to mucous membranes

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.

0001310-73-2 SODIUM HYDROXIDE

Produces severe damage

Skin Corrosion/Irritation

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

0001310-73-2 SODIUM HYDROXIDE

Severe skin irritant. Causes second-and third-degree burns on short contact

Specific Target Organ Toxicity - Repeated Exposure

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

0001310-73-2 SODIUM HYDROXIDE

Repeated exposure can lead to permanent lung damage. May cause bronchitis to develop with coughing, phlegm, and/or shortness of breath.

Specific Target Organ Toxicity - Single Exposure

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

0001310-73-2 SODIUM HYDROXIDE

Higher exposures may cause pulmonary edema.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

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

General

Keep container tightly closed. Protect from the effects of light. Protection against fire and explosion: No special precautions necessary.

Persistence and Degradability

No data available.

Bioaccumulative Potential

0001310-73-2 SODIUM HYDROXIDE

NaOH is not expected to bioconcentrate in organisms.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

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. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

Transport Canada Information

UN number: UN3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (SODIUM HYDROXIDE)

Hazard class: 8

Packaging group: lll

Hazardous substance (RQ): No Data Available

Marine Pollutant: No Data Available

Toxic-Inhalation Hazard: No Data Available

Note / Special Provision: No Data Available

U.S. DOT Information

UN number: Not regulated

Proper shipping name: Not regulated

Hazard class: Not regulated

Packaging group: Not regulated

Hazardous substance (RQ): No Data Available

IMDG Information

UN number: UN3267

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (SODIUM HYDROXIDE)

Hazard class: 8

Packaging group: lll

Marine Pollutant: No Data Available

Note / Special Provision: No Data Available

IATA Information

UN number: UN3267

Hazard class: 8

Packaging group: lll

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (SODIUM HYDROXIDE)

Note / Special Provision: No Data Available

SECTION 15) REGULATORY INFORMATION

General

Keep container tightly closed. Protect from the effects of light. Protection against fire and explosion: No special precautions necessary.

CAS	Chemical Name	% By Weight	Regulation List
0001310-73-2	SODIUM HYDROXIDE	1% - 1%	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,PH_PICCS - Philippines, The Philippine Inventory of Chemicals and Chemical Substances,KR_KECI - Korean Existing Chemicals Inventory
0002836-32-0	ACETIC ACID, 2-HYDROXY-, SODIUM SALT (1:1)	1% - 1%	DSL,TSCA,AICS,JP_ENCS - Japanese Existing and New Chemical Substances Inventory,CN_IECSC - Inventory of Existing Chemical Substances Produced or Imported in China,EU_EINECS - European_EC_Inventory_EINECS,EU_EC_Inventory - European_EC_Inventory,PH_PICCS - Philippines, The Philippine Inventory of Chemicals and Chemical Substances,KR_KECI - Korean Existing Chemicals Inventory

The information in this Section does not list non-hazardous components that might have relevant The Philippine Inventory of Chemicals and Chemical Substances, AICS, CN_IECSC - Inventory of Existing Chemical Substances Produced or Imported in China, DSL, EU_EC_Inventory - European_EC_Inventory, EU_EINECS - European_EC_Inventory_EINECS, KR_KECI - Korean Existing Chemicals Inventory, PH_PICCS - Philippines, TSCA regulatory values, if they are present at less than 1%. Please contact manufacturer for more information.

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.

General

Keep container tightly closed. Protect from the effects of light. Protection against fire and explosion: No special precautions necessary.

Version 1.0:

Revision Date: May 11, 2022

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.