

TCI AMERICA SAFETY DATA SHEET

Revision number: 2 **Revision date: 04/08/2019**

1. IDENTIFICATION

Product name: N-(Hydroxymethyl)acrylamide

Product code: M0574

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

Company: TCI America

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Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Acute Toxicity - Oral [Category 3]

Eye Damage/Irritation [Category 2B] WHMIS 2015:

Sensitization - Skin [Category 1] Germ Cell Mutagenicity [Category 1B] Toxic to Reproduction [Category 1B]

Specific Target Organ Toxicity (Single Exposure) [Category 2] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Signal word: Danger!

Hazard Statement(s): Toxic if swallowed

Causes eye irritation

May cause an allergic skin reaction

May cause genetic defects

May damage fertility or the unborn child

May cause damage to organs: Nervous System

May cause damage to organs through prolonged or repeated exposure: Nervous System

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

[Prevention]

[Response]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapors or spray. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wash hands and

face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or

attention. If exposed or concerned: Call a poison center or doctor.

[Storage] Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC]

May cause polymerization. Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: N-(Hydroxymethyl)acrylamide

 $\begin{array}{lll} \textbf{Percent:} & >98.0\%(T) \\ \textbf{CAS RN:} & 924-42-5 \\ \textbf{Molecular Weight:} & 101.11 \\ \textbf{Chemical Formula:} & C_4H_7NO_2 \\ \end{array}$

Synonyms: N-Methylolacrylamide

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.

Call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Symptoms/effects:

Acute: Redness.

Delayed: No data available

Indication of any immediate medical attention:

Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Specific hazards arising from the

chemical:

This substance may polimerize explosively when heated or involved in a fire. Container may explode when heated. Combat fire from a sheltered position. Take care as it may decompose upon combustion

or in high temperatures to generate poisonous fume.

Hazardous combustion products:

Other specific hazards:

These products include: Carbon oxides Nitrogen oxides Closed containers may explode from heat of a fire.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Environmental precautions: Methods and materials for containment

and cleaning up:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Prevent product from entering drains.

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

dispersion of dust. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Avoid all contact!

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a refrigerator.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive Light-sensitive

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators

approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form:
Crystal - Powder
White - Almost white
Odour:
No data available
Odor threshold:
No data available
No data available
No data available

Melting point/freezing point: 76°C (169°F) No data available pH: 277°C (531°F) Boiling point/range: No data available. Vapour pressure: **Decomposition temperature:** No data available Vapour density: No data available No data available **Dynamic Viscosity:** Relative density: No data available

Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Flash point: No data available Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available
Upper: No data available

Solubility(ies):

[Water] Very soluble (188g/100mL, 20°C)

[Other solvents]

Soluble: Alcohols

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Polymerization may occur under the influences of heat, light or on contact with polymerization initiators

such as peroxides etc.

Possibility of hazardous reactions: No special reactivity has been reported.

Conditions to avoid: Heat, Light

Incompatible materials: Oxidizing agents, Acids

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

RTECS Number: AS3600000

Acute Toxicity:

skn-rbt LD50:>16 g/kg ipr-rat LD50:563 mg/kg

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

eye-rbt 3 mg MLD

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

mtr-mus-fbr 0.1 mg/L/21D (-S9) spm-mus-orl 730 mg/kg/6W-C

Carcinogenicity:

orl-mus TDLo:12875mg/kg/103W-I

IARC: Group 3 (Not classifiable as NTP: No data available OSHA: No data available

carcinogenic to humans).

Reproductive toxicity:

orl-mus TDLo:15.6 mg/kg (multigenerations) orl-mus TDLo:15.6 mg/kg (multigenerations)

Target organ(s):

May cause damage to organs: Nervous System

May cause damage to organs through prolonged or repeated exposure: Nervous System

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: 16 - 109 % (by BOD) , 99 - 100 % (by TOC) , 100 % (by HPLC)

Bioaccumulative potential(BCF):

Mobility in soil

No data available

Log Pow: No data available Soil adsorption (Koc): No data available

Henry's Law (PaM ³/mol): 9.6 x 10⁻⁷

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and

Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for

Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2811 Toxic solids, organic, n.o.s 6.1 Toxic material.

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN2811 Toxic solid, organic, n.o.s 6.1 Toxic material.

<u>IMDG</u>

UN UN2811 Proper Shipping Name: Class or Division: Packing Group:

numb Toxic solid, organic, n.o.s 6.1 Toxic material. III er:

EmS number: F-A, S-A

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

MassachusettsNot ListedNew JerseyListedPennsylvaniaNot ListedCalifornia Proposition 65:Listed

Other Information

NFPA Rating:HMIS Classification:Health:3Health:3Flammability:0Flammability:0Instability:0Physical:0

International Inventories

 Canada: DSL
 On DSL

 EC-No:
 213-103-2

16. OTHER INFORMATION

Revision date: 04/08/2019 Revision number: 2

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or 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 chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.