

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Butyl Methacrylate (stabilized with HQ)

Product code: M0081

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

Company: TCI America

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Emergency telephone number:

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: Eye Damage/Irritation [Category 2B]

WHMIS 2015: Sensitization - Skin [Category 1]
Toxic to Reproduction [Category 2]

Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 2]

Flammable Liquids [Category 3] Aquatic Hazard (Acute) [Category 2]

Signal word: Warning!

Hazard Statement(s): Flammable liquid and vapor

Causes eye irritation

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child

Toxic to aquatic life

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure: Spleen

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. 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.

[Response]

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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. 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: Get medical advice or attention. In case of fire: Use dry chemical, dry sand or foam to extinguish.

[Storage] [Disposal] Store in a well-ventilated place. Keep container tightly closed. Store locked up. 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. Lachrymator

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Butyl Methacrylate (stabilized with HQ) Components:

Percent: >99.0%(GC) CAS RN: 97-88-1 Molecular Weight: 142.20 **Chemical Formula:** C8H14O2

Methacrylic Acid Butyl Ester (stabilized with HQ) Synonyms:

Stabilizers: Hydroquinone

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. Get medical

advice/attention.

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

Get medical advice/attention.

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

medical advice/attention.

Ingestion: Get medical advice/attention.Rinse mouth.

Symptoms/effects:

Acute: Redness.

May cause skin sensitization. May have effects on the respiratory tract. Delayed:

Indication of any immediate medical attention:

Not available. Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, carbon dioxide. Unsuitable extinguishing media: Water (It may scatter and spread fire.)

Specific hazards arising from the chemical:

Hazardous combustion products:

Other specific hazards:

This substance may polimerize explosively when heated or involved in a fire. Container may explode

when heated. Combat fire from a sheltered position. These products include: Carbon 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:

Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

Environmental precautions:

Methods and materials for containment

and cleaning up:

Prevent product from entering drains.

Absorb spilled material in dry sand or inert absorbent before recovering it into a covered container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be

promptly disposed of, in accordance with appropriate laws and regulations.

Prevention of secondary hazards: Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use

spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

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

generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands

and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid all contact!

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool, dark and well-ventilated place.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

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

Personal protective equipment

Respiratory protection: Half or full facepiece 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.

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear Colour: Colorless Characteristic Odour: Odor threshold: No data available **Odour threshold:** No data available

Melting point/freezing point: No data available -25°C (-13°F) Boiling point/range: 164°C (327°F) Vapour pressure: No data available.

Decomposition temperature: No data available Vapour density: 4.9 No data available

Relative density: **Dynamic Viscosity:** 0.90

Kinematic viscosity: No data available

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

Acetate=1):

51°C (124°F) 290°C (554°F) Flash point: Autoignition temperature:

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

> 2% Lower: 8% Upper:

Solubility(ies):

[Water] Very slightly soluble (0.6g/100mL)

[Other solvents] Miscible: Ether, Ethanol Soluble: Many organic solvents

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, Spark, Open flame, Static discharge, Light

Incompatible materials: Oxidizing agents

Carbon dioxide, Carbon monoxide Hazardous decomposition products:

11. TOXICOLOGICAL INFORMATION

RTECS Number: OZ3675000

Acute Toxicity:

ihl-rat LC50:4910 ppm/4H orl-mus LD50:12900 mg/kg orl-rat LD50:16 g/kg skn-rbt LD50:11300 uL/kg

Skin corrosion/irritation:

skn-rbt 500 uL MLD

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

ipr-rat TDLo:690 mg/kg (5-15D preg) ihl-rat TCLo:600 ppm/6H (6-20D preg)

Target organ(s):

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure: Spleen

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: 96h LC50:5.6 mg/L (Oryzias latipes)
Crustacea: 48h EC50:25 mg/L (Daphnia magna)

Algae: 72h EC50:14 mg/L (Selenastrum capricornutum)

Persistence / degradability: 88% (by BOD), 100% (by GC)

Bioaccumulative potential(BCF):

Mobility in soil

91

 Log Pow:
 2.26 - 3.01

 Soil adsorption (Koc):
 880

 Henry's Law (PaM ³/mol):
 80

13. DISPOSAL CONSIDERATIONS

Listed waste U147/Maleic anhydride

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:

UN2227 n-Butyl methacrylate, stabilized 3 Flammable liquid

<u>IATA</u>

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

UN2227 n-Butyl methacrylate, stabilized 3 Flammable liquid II

<u>IMDG</u>

UN UN2227 Proper Shipping Name: Class or Division: Packing Group:

numb n-Butyl methacrylate, stabilized 3 Flammable liquid III er:

EmS number: F-E, S-D

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: Not Listed SARA 302: Not Listed

State Regulations
State Right-to-Know

Massachusetts
New Jersey
Pennsylvania
California Proposition 65:
Listed
Listed
Not Listed

Other Information

NFPA Rating:HMIS Classification:Health:1Health:1Flammability:2Flammability:2Instability:0Physical:0

International Inventories

 Canada: DSL
 On DSL

 EC-No:
 202-615-1

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

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.