

# TCI AMERICA SAFETY DATA SHEET

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

# 1. IDENTIFICATION

Product name: Allyl Glycidyl Ether

Product code: A0221

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

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Transportation Emergencies: Chemtrec 24-Hour

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Responsible department:

TCI America

Environmental Health Safety and Security

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#### 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:

Acute Toxicity - Oral [Category 4]
Acute Toxicity - Inhalation [Category 3]
Skin Corrosion/Irritation [Category 2]
Eye Damage/Irritation [Category 1]
Sensitization - Skin [Category 1]
Germ Cell Mutagenicity [Category 2]
Carcinogenicity [Category 2]
Toxic to Reproduction [Category 2]

Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

Flammable Liquids [Category 3]
Aquatic Hazard (Acute) [Category 3]
Aquatic Hazard (Long-Term) [Category 3]

Signal word: Danger!

Hazard Statement(s): Flammable liquid and vapor

Harmful if swallowed
Toxic if inhaled
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Suspected of causing genetic defects

Suspected of causing cancer

Suspected of damaging fertility or the unborn child

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Causes damage to: Liver Respiratory System Kidney Central Nervous System

Causes damage to organs through prolonged or repeated exposure: Respiratory System

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. 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.

[Response] If swallowed: Call a poison center or doctor if you feel unwell. 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 inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. 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. If

exposed: Call a poison center or doctor.

[Storage] Store in a well-ventilated place. Keep container tightly closed. 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. May form explosive peroxides. May be harmful if in contact with skin.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

 Components:
 Allyl Glycidyl Ether

 Percent:
 >99.0%(GC)

 CAS RN:
 106-92-3

 Molecular Weight:
 114.14

 Chemical Formula:
 C6H10O2

**Synonyms:** 1-Allyl-2,3-epoxypropane

# 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: Call a POISON CENTER or doctor/physician. Rinse mouth.

Symptoms/effects:

Acute: Dizziness. Redness. Drowsiness.

**Delayed:** May cause heritable genetic damage in humans. May cause skin sensitization.

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:

Explosion risk in case of fire. Fight fire remotely due to the risk of explosion.

Hazardous combustion products: Other specific hazards:

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

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

Combat fire from a sheltered position.

# 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.

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#### 7. HANDLING AND STORAGE

Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to Precautions for safe handling:

cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. 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. Avoid shock and friction. Wash hands and face

before breaks and immediately after handling the product.

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

Avoid all contact!

Confirm in advance if peroxides exist when operations involving heating such as distillation are carried

out.

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. Be sure not to give the container unexpected impacts, such as falling down or falling

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** 

ACGIH TLV(TWA): 1 ppm OSHA PEL(CL): 10 ppm

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: 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

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

Melting point/freezing point: -100°C (-148°F) No data available pH: 154°C (309°F) Boiling point/range: No data available. Vapour pressure: **Decomposition temperature:** No data available Vapour density: No data available Relative density: **Dynamic Viscosity:** No data available 0.97

Kinematic viscosity: No data available No data available

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

Acetate=1):

227°C (441°F) 49°C (120°F) Flash point: Autoignition temperature:

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

No data available Lower:

No data available Upper:

Solubility(ies):

[Water] Slightly soluble

[Other solvents]

Soluble: Alcohols, Benzene, Acetone, Toluene

# 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. May form explosive peroxides.

Possibility of hazardous reactions: May explosively decompose on heating, shock, friction, etc.

Conditions to avoid: Heat, Spark, Open flame, Static discharge, Shock, Friction, Air, Light

Incompatible materials: Oxidizing agents, Acids, Bases Hazardous decomposition products: Carbon dioxide, Carbon monoxide Allyl Glycidyl Ether TCI AMERICA Page 4 of 5

# 11. TOXICOLOGICAL INFORMATION

RTECS Number: RR0875000

**Acute Toxicity:** 

ihl-rat LC50:670 ppm/8H orl-mus LD50:390 mg/kg orl-rat LD50:1600 mg/kg skn-rbt LD50:2550 mg/kg

Skin corrosion/irritation:

skn-rbt 485 mg/3D MOD skn-rbt 2 mg/24H SEV

Serious eye damage/irritation:

eye-rbt 750 ug/24H SEV eye-rbt 97 mg SEV

Respiratory or skin sensitization:

No data available

**Germ cell mutagenicity:** mmo-sat 1 mg/plate (-S9) sln-dmg-orl 5500 ppm

mmo-sat 100 ug/plate (+S9)

Carcinogenicity: No data available

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

Reproductive toxicity:

No data available

Target organ(s):

Causes damage to: Liver Respiratory System Kidney Central Nervous System
Causes damage to organs through prolonged or repeated exposure: Respiratory System

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

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

Persistence / degradability: No data available Bioaccumulative potential(BCF): No data available

Mobility in soil

Disposal of container:

**Log Pow:** 0.34

Soil adsorption (Koc): No data available Henry's Law (PaM ³/mol): No data available

# 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. Consult an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. 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. 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.

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#### 14. TRANSPORT INFORMATION

DOT (US)

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

UN2219 Allyl glycidyl ether 3 Flammable liquid

<u>IATA</u>

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

UN2219 Allyl glycidyl ether 3 Flammable liquid

**IMDG** 

er:

UN UN2219 Proper Shipping Name: Class or Division: Packing Group:

numb Allyl glycidyl ether 3 Flammable liquid III

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:2Health:2Flammability:2Flammability:2Instability:0Physical:0

**International Inventories** 

 Canada: DSL
 On DSL

 EC-No:
 203-442-4

# 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.