

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

## 1. IDENTIFICATION

Product name: Product code:

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

## 2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:	Acute Toxicity - Oral [Category 3] Acute Toxicity - Dermal [Category 3] Eye Damage/Irritation [Category 1] Flammable Liquids [Category 3] Skin Corrosion/Irritation [Category 1B]
Signal word:	Danger!
Hazard Statement(s):	Flammable liquid and vapor Toxic if swallowed or in contact with skin Causes severe skin burns and eye damage

None.

## Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] 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 dusts or mists. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately 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. Store in a well-ventilated place. Keep cool. 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] Propiolic Acid P0497

For laboratory research purposes. Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

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 **TCI AMERICA** 

3. COMPOSITION/INFORMATION	ON INGREDIENTS
Substance/mixture:	Substance
Components:	Propiolic Acid
Percent:	>97.0%(GC)(T)
CAS RN:	471-25-0
Molecular Weight:	70.05
Chemical Formula:	C3H2O2
Synonyms:	Propargylic Acid
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. Immediately call a
	POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water.
	Immediately 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.
Lyo oontaoti	Continue rinsing.Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
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Symptoms/effects:	
Acute:	Pain. Redness.
Delayed:	No data available
Indication of any immediate medical a	attention:
Not available.	
Notes to physician:	
No data available	
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Unsuitable extinguishing media:	Solid streams of water
onsultable extinguishing metila.	
Hazardous combustion products:	These products include: Carbon oxides
Other specific hazards:	Closed containers may explode from heat of a fire.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.
6. ACCIDENTAL RELEASE MEAS	UKES

Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: Prevention of secondary hazards:	controlled around the leakage area by roping off, etc. Prevent product from entering drains.			
7. HANDLING AND STORAGE				
Precautions for safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfacesNo 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 contact with skin, eyes and clothing.			
Conditions for safe storage, including any incompatibilities				
Storage conditions:	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Light-sensitive Hygroscopic			
Packaging material:	Comply with laws.			

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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.
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.
Impervious gloves.
Safety goggles. A face-shield, if the situation requires.
Impervious protective clothing. Protective boots, if the situation requires.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Liquid Clear Colorless - Yellow No data available No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	9°C (48°F) 58°C /1.6kPa (136°F) No data available 1.14 No data available No data available	pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1):	No data available No data available. No data available No data available No data available
Flash point: Flammability(solid, gas):	58°C (136°F) No data available	Autoignition temperature: Flammability or explosive limits: Lower: Upper:	No data available No data available No data available
Solubility(ies): [Water] [Other solvents] Soluble:	Miscible Ether, Chloroform, Ethanol		
10. STABILITY AND REACT	IVITY		

Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: No data available Stable under proper conditions. No special reactivity has been reported. Spark, Open flame, Static discharge Oxidizing agents, Bases Carbon dioxide, Carbon monoxide TCI AMERICA

# 11. TOXICOLOGICAL INFORMATION

# RTECS Number: UD9300000

Acute Toxicity: orl-rat LD50:100 mg/kg skn-gpg LD50:100 mg/kg		ipr-rat LD50:25 mg/kg		
Skin corrosion/irritation: No data available				
Serious eye damage/irritation: No data available				
<b>Respiratory or skin sensitization:</b> No data available				
Germ cell mutagenicity: No data available				
<b>Carcinogenicity:</b> No data available				
IARC: No data available	NTP:	No data available	OSHA:	No data available
<b>Reproductive toxicity:</b> No data available				
Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
12. ECOLOGICAL INFORMATION Ecotoxicity:				
	No data available			
Ecotoxicity:	No data available No data available			
Ecotoxicity: Fish:				
Ecotoxicity: Fish: Crustacea:	No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow:	No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc):	No data available No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow:	No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM <sup>3</sup> /mol):	No data available No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM <sup>3</sup> /mol): 13. DISPOSAL CONSIDERATIONS	No data available No data available No data available No data available No data available No data available No data available	2-hydroxy- compd With		
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM <sup>3</sup> /mol):	No data available No data available P188/Benzoic acid (3aS-cis)-1,2,3,3a, Recycle to process Local rules and reg and burn in a chen intended to provide with this section er	I, 2-hydroxy-, compd. With 8,8a-hexahydro-1,3a,8-trimethylpyrr s if possible. It is the generator's res gulations. You may be able to dissol nical incinerator equipped with an af e assistance but does not replace th nsure regulatory compliance accordi	ponsibility to ve or mix ma terburner and ese laws, not ng to the law	comply with Federal, State and terial with a combustible solvent d scrubber system. This section is r does compliance in accordance . US EPA guidelines for
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM <sup>3</sup> /mol): <u>13. DISPOSAL CONSIDERATIONS</u> Listed waste	No data available No data available Data no data available No data	8,8a-hexahydro-1,3a,8-trimethylpyrr s if possible. It is the generator's res gulations. You may be able to dissol nical incinerator equipped with an af e assistance but does not replace th	ponsibility to ve or mix ma terburner and ese laws, not ng to the law d in 40 CFR I vs, or the soil ontainers.	comply with Federal, State and terial with a combustible solvent d scrubber system. This section is r does compliance in accordance . US EPA guidelines for Parts 261. The product should not

14. TRANSPORT INFORMATION

DOT (US) UN number: UN2920	<b>Proper Shipping Name:</b> Corrosive liquids, flammable, n.o.s	<b>Class or Division:</b> 8 Corrosive material	<b>Subrisk(s):</b> 3 Flammable liquid	Packing Group: II
<u>IATA</u> UN number: UN2920	<b>Proper Shipping Name:</b> Corrosive liquid, flammable, n.o.s	<b>Class or Division:</b> 8 Corrosive material	<b>Subrisk(s):</b> 3 Flammable liquid	Packing Group: II
IMDG UN UN2920 numb er:	<b>Proper Shipping Name:</b> Corrosive liquid, flammable, n.o.s	Class or Division: 8 Corrosive material	<b>Subrisk(s):</b> 3 Flammable liquid	Packing Group: II
EmS number:	F-E, S-C			

# 15. REGULATORY INFORMATION

## Toxic Substance Control Act (TSCA 8b.):

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

US Federal Regu	lations			
<b>CERCLA Hazard</b>	ous substanc	e and Reportable Quantity:		
SARA 313:		Not Listed		
SARA 302:		Not Listed		
State Regulation	s			
State Right-to-Kr				
Massachuse		Not Listed		
New Jersey		Not Listed		
Pennsylvania	а	Not Listed		
California Propos	sition 65:	Not Listed		
Other Information	n			
NFPA Rating:	_		HMIS Classification:	
Health:	3		Health:	3
Flammability:	2		Flammability:	2
Instability:	1		Physical:	1
International Inve	entories			
Canada: NDSL		On NDSL		
EC-No:		207-437-8		

# 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.