

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

1. IDENTIFICATION

Product name:

Product code:

Product use:

Restrictions on use:

Triisopropanolamine (mixture of isomer) N0104

TCI AMERICA

SAFETY DATA SHEET

For laboratory research purposes. Not for drug or household 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:	Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Specific Target Organ Toxicity (Single Exposure) [Category 3] Aquatic Hazard (Acute) [Category 3] Aquatic Hazard (Long-Term) [Category 3]
Signal word:	Warning!
Hazard Statement(s):	Causes skin irritation Causes serious eye irritation Harmful to aquatic life Harmful to aquatic life with long lasting effects May cause drowsiness or dizziness.
Pictogram(s) or Symbol(s):	
Precautionary Statement(s):	
[Prevention]	Avoid breathing dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wash hands and face thoroughly after handling. Wear protective gloves, eye protection.
[Response]	If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it 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.
[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 be harmful if swallowed.

Emergency telephone number:

Transportation Emergencies:

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

Environmental Health Safety and Security

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

Chemical Emergencies:

+1-503-286-7624

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

+1-503-286-7624

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components: Percent: CAS RN: Molecular Weight: Chemical Formula: Synonyms:	Substance Triisopropanolamine (mixture of isomer) >98.0%(T) 122-20-3 191.27 C9H21NO3 Nitrilotripropanol (mixture of isomer)			
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 if you feel unwell.			
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.			
Eye contact:	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/attention.			
Ingestion:	Get medical advice/attention if you feel unwell. Rinse mouth.			
Symptoms/effects:				
Acute:	Dizziness. Redness. Drowsiness.			
Delayed:	No data available			
Indication of any immediate medic	al 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:	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 contact with skin, eyes and clothing.
Conditions for safe storage, including ar	ny 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. Hygroscopic

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.
Dust 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:	Solid Crystal - Lump White No data available No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	No data available 305°C (581°F) No data available No data available No data available No data available	pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1):	No data available No data available. 6.6 No data available No data available
Flash point: Flammability(solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: Upper:	320°C (608°F) 0.8% 5.8%
Solubility(ies): [Water] [Other solvents] Soluble: Slightly soluble:	Soluble (83g/100mL, 20°C) Ether, Ethanol Chloroform		

10. STABILITY AND REACTIVITY

Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: No data available Stable under proper conditions. Dust explosion possible if in powder or granular form, mixed with air. Static discharge Oxidizing agents, Strong acids Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx) **TCI AMERICA**

11. TOXICOLOGICAL INFORMATIO	ON			
RTECS Number: UB8750000				
Acute Toxicity: orl-rat LD50:4730 mg/kg	skn-rbt LDLo:10 mL/kg			
Skin corrosion/irritation: No data available				
Serious eye damage/irritation: eye-rbt 5 mg SEV				
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: No data available				
Target organ(s): May cause drowsiness or dizziness.				
12. ECOLOGICAL INFORMATION				
Ecotoxicity:				
Fish: Crustacea:	48h LC50:>1000 ppm (Oryzias latipes) No data available			
Algae:	No data available			
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	3.4 % (by BOD) , 9.8 % (by TOC) , 35.0 % (by GC) <0.06 (conc. 2.5 ppm) , <0.57 (conc. 0.25 ppm)			
Log Pow: Soil adsorption (Koc):	-1.2 37			
Henry's Law (PaM ³/mol):	9.9 x 10 ⁻⁷			
13. DISPOSAL CONSIDERATIONS				
Disposal of product: Disposal of container:	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. 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)	Non-hazardous for transportation.			
IATA	Non-hazardous for transportation.			
IMDG	Non-hazardous for transportation.			

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

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

<u>US Federal Regu</u> CERCLA Hazardo SARA 313: SARA 302:	lations_ ous substance and Rep	oortable Quantity: Not Listed Not Listed		
State Regulations State Right-to-Kn Massachuset New Jersey Pennsylvania California Propos	ow ts	Listed Not Listed Listed Not Listed		
Other Information NFPA Rating: Health: Flammability: Instability:	2 1 0		HMIS Classification: Health: Flammability: Physical:	2 1 0
International Inve Canada: DSL EC-No:	entories_	On DSL 204-528-4		

16. OTHER INFORMATION

Revision date: 07/06/2018

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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.