

Material Safety Data Sheet

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Version 1.1

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name	TRIPROPYLAMINE, 99+%
Product Number	239712
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
TRIPROPYLAMINE	102-69-2	203-047-7	None
Formula	C9H21N		
Molecular Weight	143.27 AMU		
Synonyms	Propyldi-n-propylamine * Tripropylamine (8CI) *		
	Tri-n-propylamine		

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Flammable. Harmful in contact with skin. Toxic by inhalation and if swallowed. Causes burns. Harmful to aquatic organisms.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER EYE CONTACT

Assure adequate flushing of the eyes by separating the eyelids with fingers.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back. Emits toxic fumes under fire conditions.
Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area. Shut off all sources of ignition.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

SPECIAL REQUIREMENTS: Hygroscopic.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

9 - Physical and Chemical Properties

Appearance	Physical State: Liquid Color: Colorless	
Property	Value	At Temperature or Pressure
pH	11.4	20 °C Concentration: 2.6 g/l

BP/BP Range	155 - 158 °C	760 mmHg
MP/MP Range	-93 °C	
Flash Point	34 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	180 °C	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	Lower: 0.7 % Upper: 5.6 %	
Vapor Pressure	2.9 mmHg	20 °C
SG/Density	0.753 g/cm3	
Partition Coefficient	Log Kow: 2.68	
Viscosity	< 0.001 Pas	25 °C
Vapor Density	4.9 g/l	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

10 - Stability and Reactivity

STABILITY

Conditions of Instability: Moisture.

Conditions to Avoid: Moisture.

Materials to Avoid: Acids, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and nitrogen oxides.

11 - Toxicological Information

RTECS NUMBER: TX1575000

ACUTE TOXICITY

LC50

Inhalation

Rat

1,500 mg/m3

4 H

LD50

Oral

Rat

96 mg/kg

LC50

Inhalation

Rat

5,100 mg/m3

4H

LC50

Inhalation

Mouse

3,800 mg/m3

2H

LD50
Skin
Rabbit
570 UL/KG

LC50
Inhalation
Mammal
5,100 mg/m3

IRRITATION DATA

Skin
Rabbit
Remarks: Severe irritation effect

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.
Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

12 - Ecological Information

ELIMINATION

Elimination: > 70 %

ECOTOXICOLOGICAL EFFECTS

Test Type: LC50 Fish
Species: *Leuciscus idus*
Time: 96 h
Value: 32 - 46 mg/l

Test Type: LC50 Fish
Species: *Pimephales promelas* (Fathead minnow)
Time: 96 h
Value: 45.6 - 56.70 mg/l

Test Type: EC50 *Daphnia*
Species: *Daphnia magna*
Time: 48 h
Value: 100 mg/l

Test Type: EC50 Algae
Species: *Scenedesmus subspicatus*
Time: 72 h
Value: 23 mg/l

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

UN#: 2260
Class: 3
PG: III
Proper Shipping Name: Tripropylamine

IMDG

UN#: 2260
Class: 3
PG: III
Subrisk: 8
Proper Shipping Name: Tripropylamine
Marine Pollutant: No
Severe Marine Pollutant: No

IATA

UN#: 2260
Class: 3
PG: III
Subrisk: 8
Proper Shipping Name: Tripropylamine
Inhalation Packing Group I: No

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: T C

Toxic. Corrosive.

R-PHRASES: 10 21 23/25 34 52

Flammable. Harmful in contact with skin. Toxic by inhalation and if swallowed. Causes burns. Harmful to aquatic organisms.

S-PHRASES: 26 36/37/39 45 60

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2

SWITZERLAND

SWISS POISON CLASS: 3

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
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