

Triethanolamine

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /
March 26, 2012 / Rules and Regulation

Revision Date: 05-Nov-2024
Supersedes: 02-Jul-2021

1 PRODUCT & COMPANY IDENTIFICATION

Product Name:	Triethanolamine	Distributor:	MakingCosmetics Inc.
Synonyms:	No data available	Address:	10800 231 st Way NE Redmond, WA 98053 (USA)
INCI Name:	Triethanolamine	Phone / Fax:	425-292-9502 / 425-292-9601
CAS Number:	102-71-6	Web:	www.makingcosmetics.com
Formula:	No data available		
Product Form:	Liquid		
Product Use:	Cosmetic use	Emergency Telephone Number:	1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification:	Not classified.		
GHS Labeling:	Not a dangerous substance according to GHS.		
GHS Hazard Pictograms:	None.		
GHS Hazard Statements:	None.		
GHS Precautionary Statements:	None.		
Potential Health Hazards:	Eyes: May be an irritant. Inhalation: May be an irritant. Skin: May be an irritant. Ingestion: May cause nausea, vomiting, and diarrhea.		
NFPA Ratings (704):	Health	2	Moderate
	Flammability	1	Slight
	Reactivity	1	Slight
	Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Triethanolamine	102-71-6	>99%	Not Available
Diethanolamine	111-42-2	≤0.5%	Not Available

4 FIRST AID MEASURES

Eyes:	Rinse with lukewarm, gentle water for several minutes while holding eyelids open. If eye irritation persists, get medical advice/attention. Liquid, mists, and/or vapor may cause eye irritation. Symptoms of irritation include redness and tears.
Inhalation:	Remove to fresh air. Get medical advice/attention if you feel unwell or are concerned. Symptoms of exposure may include coughing, wheezing, sore throat, and difficult breathing.
Skin:	Wash skin with lukewarm, gentle water for several minutes. If skin irritation occurs, get medical advice/attention. Symptoms of irritation include local redness, dryness, and discomfort
Ingestion:	Do Not Induce Vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor if you feel unwell or are concerned. Swallowing can cause irritation of the digestive tract, abdominal and chest pain, nausea, vomiting, and diarrhea.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	May be combustible at high temperatures. Use appropriate media (water fog, fine spray, alcohol-resistant foam, dry chemical) for surrounding environment and adjacent fire. Do not use violent steam generation or eruption upon application of direct water stream to hot product or high-pressure water streams as it may scatter hot liquid.
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Special protective equipment & precautions for firefighters:	Wear a positive pressure, self-contained breathing apparatus and full protective clothing, including eye protection and boots. Evacuate the area and fight fire from a safe distance or protected location. Contain water run-off if possible. Approach the fire from upwind to avoid hazardous vapors. Burning liquids may be extinguished by dilution with water. Water spray may be used to flush spills away from ignition sources. Use water spray to cool fire-exposed containers.
Flash Points:	354.2°F (179°C)
Specific hazards arising from the chemical:	Product can burn if heated. Combustible if involved in a fire. Heat from fire can cause a rapid buildup of pressure inside containers, which may cause explosive rupture. See also Stability and reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Stop the spill if it is safe to do so. Contain the spill with earth, sand, or other suitable non-combustible absorbent. Keep materials that can burn away from spilled product. Do not absorb with sawdust, woodchips, or other cellulose materials. Clean up spills immediately. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Avoid liquid release into sewers/public water/environment. Notify environmental authorities in case of leak.
Methods and material for containment and cleaning up:	For small spills: Take up the liquid spill using an inert absorbent material. Scoop up spilled product and any contaminated absorbents into appropriate, labeled containers. Contaminated absorbent may pose the same hazards as the spilled product. Flush the area with water and collect wash-water for proper disposal. For large spills: Pump spilled liquid into suitable containers. Prevent material from contaminating soil and from entering sewers or waterways. Dispose of absorbed material in accordance with the regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	Avoid breathing fumes/gas/mist/vapors/spray. Avoid generating airborne fumes/vapors/mist from this product. Handle this product with adequate ventilation. Wash hands and exposed skin thoroughly after exposure to product and at the end of the work shift. Keep away from flames and hot surfaces - No smoking. Prevent release of this material to the environment; prevent spills and keep away from drains. Never perform any welding, cutting, soldering, drilling or other hot work on an empty vessel, container, or piping until all liquid and vapors have been cleared. Inspect containers for leaks before handling. Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment. Keep containers tightly closed when not in use. Store in a cool, dry, and well-ventilated area. Store away from sunlight, heat, and ignition sources. Avoid contact with strong oxidizing agents, acids, halogenated hydrocarbons, nitrating agents, alkali metals, metal hydrides, and aluminum. Avoid high temperatures and exposure to air and moisture. Store away from incompatible materials (see section 10 for incompatibilities).
Conditions for safe storage, incl. any incompatibilities:	

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Triethanolamine	5 mg/m ³	TLV	ACGIH
	0.5 ppm / 3.1 mg/m ³	TWA	Ontario CA
Diethanolamine	1 mg/m ³ (inhalable fraction & vapor)	TLV	ACGIH
	3 ppm / 15 mg/m ³	PEL	OSHA

TWA: Time Weighted Average over 8 hours of work.
 TLV: Threshold Limit Value over 8 hours of work.
 REL: Recommended Exposure Limit
 PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
 IDLH: Immediately Dangerous to Life or Health
 WEEL: Workplace Environmental Exposure Levels
 CEIL: Ceiling

Personal Protection:

Eyes:	Wear safety goggles or a face shield.
Inhalation:	Ensure adequate ventilation. Respiratory protection is needed in the event of air concentration exceeding the above OELs.
Body:	Wear impervious chemical-resistant gloves (butyl rubber, neoprene rubber) and clean, body-covering protective

Other: coveralls. Impervious apron and chemical-resistant boots.
Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, viscous liquid	Vapor Pressure at 20°C:	<0.01 mmHg
Odor:	Slight ammonia-like	Vapor Density:	5.14 (air=)
Odor Threshold:	No data available	Evaporation Rate:	<0.01 (n-butyl acetate=1)
Color:	Colorless	Flammability:	Not applicable
Molecular Weight:	No data available	Upper/lower Explosive Limit:	Lower: 1.5%
pH:	10.5 (10% aqueous solution)	Flash Point (PMCC):	354.2°F (179°C)
Boiling Point:	644°F (340°C)	Specific Gravity at 20°C:	1.12 (H2O=1)
Melting/Freezing Point:	70°F (21°C)	Water Solubility:	Completely soluble
Relative Density at 20°C:	1.12 (H2O=1)	Auto-Ignition Temperature:	662°F (350°C)
Partition Coefficient: n-octanol/water:	-2.53 (n-octanol/water)	Decomposition Temperature:	392°F (200°C)
Dynamic Viscosity at 25°C:	-601 mPa.s	Explosive Properties:	No data available
Oxidizing Properties:	No data available	Metal Corrosion:	No data available

10 STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical Stability:	Stable.
Hazardous Polymerization:	Will not occur under conditions of normal use.
Conditions to Avoid:	Store away from sunlight, heat, and ignition sources. Avoid high temperatures and exposure to air and moisture.
Incompatible Materials:	Avoid contact with strong oxidizing agents, acids, halogenated hydrocarbons, nitrating agents, alkali metals, metal hydrides, and aluminum.
Hazardous Decomposition Products:	No data available.
Possible Hazardous Reactions:	No data available.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available.
Skin:	Triethanolamine is not irritating to skin.
Component	
Triethanolamine:	(Rabbit) >2,000 mg/kg.
Diethanolamine:	(Rabbit) 8,180 mg/kg.
Eyes:	Triethanolamine is not irritating to skin.
Inhalation:	Diethanolamine: (Rat) Vapors: >0.4 mg/L. (Rat) Dust and Mists: >0.4 mg/L.
Ingestion:	
Component	
Triethanolamine:	(Rat) 4,190 mg/kg.
Diethanolamine:	(Rat) 1,600 mg/kg.
Carcinogenicity:	Triethanolamine is not carcinogenic to humans (Group 3). Diethanolamine is possibly carcinogenic to humans (Group 2B).
Teratogenicity:	No data available.
Germ Cell Mutagenicity:	No data available.
Specific Target Organ Toxicity:	No data available.
Reproductive Toxicity:	No data available.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	No data available.
Aquatic Vertebrate:	No data available.
Aquatic Invertebrate:	No data available.
Terrestrial:	No data available.

Persistence and Degradability:	Readily biodegradable.
Bioaccumulative Potential:	Low potential for bioaccumulation; Log Pow = -2.3 at 25°C.
Mobility in Soil:	Low potential for absorption in soil. Log soil organic carbon partition coefficient (Log Koc) = 1.24 (calculated).
PBT and vPvB Assessment:	No data available.
Other Adverse Effects:	No data available.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Do not dump into any sewers, on the ground, or into any body of water. For unused and uncontaminated product, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product. Regulations may vary in different locations.
Product Containers:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	This product is regulated as a hazardous material according to the DOT only in bulk quantities (greater than 25,000 lb). 49 CFR
TDG (Transportation of Dangerous Goods, Canada):	No data available.
IMDG (International Maritime Dangerous Goods):	Not regulated.
IATA (International Air Transport Association):	Not regulated.
ICAO (International Civil Aviation Organization):	No data available.

15 REGULATORY INFORMATION

TSCA Registered:	Yes.
TSCA 4(a) SNUR:	No.
SARA Title III Section 313:	Diethanolamine listed.
Canada (DSL):	Listed.
EU (EINECS):	Listed.
China (IECSC):	Listed.
Australia (AICS):	Listed.
Japan (ENCS):	Listed.
Philippines (PICCS):	Listed.
Korea Inventory List:	Listed.
Taiwan (TCSI):	Listed.
Turkey Inventory List:	Listed.
New Zealand (NZIoC):	Listed.

16 OTHER INFORMATION

Revision Date:	05-Nov-2024
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.