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# **Triethanolamine**

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

PRODUCT & COMPANY IDENTIFICATION

**Triethanolamine** Product Name: Synonyms: 2,2',2"-nitrilotriethanol; Address:

TEA

INCI Name: Triethanolamine

CAS Number: 102-71-6

Formula: No data available

Product Form: Liquid

Product Use: Cosmetic use Distributor: MakingCosmetics.com Inc. 10800 231st Way NE

Redmond, WA 98053 (USA)

425-292-9502 / 425-292-9601 Phone / Fax: Web: www.makingcosmetics.com

Emergency Telephone Number: 1-800-424-9300

(Chemtrec)

## **HAZARDS IDENTIFICATION**

**GHS Classification:** Eye Irrit. 2 GHS Signal Word: WARNING

**GHS Hazard Pictograms:** 

**GHS Hazard Statements:** H319: Causes serious eve irritation

**GHS Precautionary Statements:** P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do. Continue rinsing

Potential Health Hazards: Eyes: Slightly irritating to the eyes.

Inhalation: No known significant effects or critical hazards. Skin: No known significant effects or critical hazards. Ingestion: No known significant effects or critical hazards.

NFPA Ratings (704):

Health Moderate Flammability 1 Slight Reactivity 1 Slight

Specific Hazard N/A

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight Component CAS No. Weight % Triethanolamine 102-71-6 >99.0% Not available N,N - Diethanolamine 111-42-2 ≤0.5% Not available

## FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing

to rinse entire surface of eye and lids with water. Get medical attention.

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Gt medical attention if Inhalation:

breathing becomes difficult or respiratory irritation persists.

Wash skin with plenty of soap and water for several minutes Get medical attention if skin irritation Skin:

develops or persists.

If patient is conscious and can swallow, give two glasses of water (16oz), induce vomiting as directed Ingestion:

by medical personnel. Do Not Induce Vomiting or give anything by mouth to an unconscious or

convulsing person. Get medical attention if necessary.





Suitable (and unsuitable) extinguishing media:

Ignition temperature: 324°C (615°F). Flammable limits: Lower: 1%; Upper: 10%. Use appropriate media (dry chemical, foam, or carbon dioxide) for adjacent fire. Use water spray to cool fire-exposed containers. Water or foam may cause

Wear self-contained, approved breathing apparatus and full protective clothing,

Special protective equipment & precautions for firefighters:

including eye protection and boots. 179°C (354°F) (CC)

Flash Points:

Specific hazards arising from the chemical:

Container may rupture from gas generation I a fire situation. Violent stream generation or eruption may occur upon application or direct water stream to hot

liquids. See also Stability and Reactivity section.

### **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment & emergency procedures:

Ventilate area. Avoid breathing vapor. Pressure demand air supplied respirators should always be worn when the airborne concentration of the contaminant or oxygen is unknown. Otherwise, wear respiratory protection and other personal protective equipment as appropriate for the potential exposure hazard. See section 8 for recommendations on the use of personal protective equipment.

**Environmental precautions:** 

Avoid liquid release into sewers/public water. Notify environmental

authorities in case of large leaks.

Methods and material for containment and cleaning up: Contain spill if possible. Shovel up material and place in air-tight container. Avoid contact with skin, eyes, or clothing. Dispose of all waste and cleanup

materials in accordance with regulations.

## **HANDLING & STORAGE**

Minimum feasible handling temperatures should be maintained. See section 8 for Safe handling:

recommendations on the use of personal protective equipment. Keep container closed when not

in use.

Periods of exposure to high temperatures should be minimized. Water contamination should be Safe storage:

avoided. May segregate or freeze below 16°C (60°F). Thaw and mix before sampling or using. Storage temperature: 30-43°C (86-109°F) Keep away from heat and incompatible materials (see

section 10 for incompatibilities).

## **EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits** Component Basis Entity Triethanolamine  $5.0 \, \text{mg/m}^3$ TLV-TWA **ACGIH** N,N Diethanolamine  $1 \text{ mg/m}^3$ TWA **ACGIH** 

TWA: Time Weighted Average over 8 hours of work. TLV: Threshold Limit Value over 8 hours of work.

RFL: 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: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Inhalation: Airborne concentration should be kept to lowest levels possible. If vapor, mist, or dust is generated and

> the occupational exposure limit of the product, or any component of the product is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when

airborne concentration of the contaminant or oxygen content is unknown.

Skin: Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should

be laundered or dry cleaned. Use gloves chemically resistant to this material.

Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing Other:

facilities accessible to areas of use and handling.





No data available

### 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid Vapor Pressure: No data available Odor: Ammonia-like Vapor Density: No data available Odor Threshold: No data available **Evaporation Rate:** No data available Color: No data available Flammability: No data available Upper/lower Explosive Limit: Molecular Weight: No data available No data available pH: No data available Flash Point: 179°C (354°F) (CC) **Boiling Point:** 336.1°C (637.0°F) Specific Gravity @ 25°C: 1.120-1.128 Melting Point: Solubility in Water: No data available No data available No data available Auto-Ignition Temperature: No data available

Relative Density: Partition Coefficient: n-

octanol/water:

No data available

No data available

Viscosity: **Oxidizing Properties:** No data available Refractive Index: 1.481-1.486 Water, wt%: 0.2% MAX

**Explosive Properties:** No data available Freezing Point: 20.5°C / 68.9°F Triethanolamine, wt%: 99.0% MIN 149.19g/mol Molecular weight:

Decomposition Temperature:

## 10 STABILITY AND REACTIVITY

Reactivity: No data available Chemical Stability: No data available

Hazardous Polymerization: Hazardous polymerization will not occur.

Exposure to elevated temperatures can cause product to decompose. Generation Conditions to Avoid:

of gas during decomposition can cause pressure in closed systems. Avoid

moisture.

Avoid contact with: Nitrites, strong acids, strong oxidizers. Incompatible Materials:

Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases. Corrosive when wet. Heating above 60°C in the presence of aluminum can result in corrosion and generation of flammable hydrogen gas. Avoid unintended contact with: Halogenated

hydrocarbons.

Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, **Hazardous Decomposition Products:** 

carbon dioxide, irritating aldehydes and ketones may be formed on burning in a

limited air supply.

## TOXICOLOGICAL INFORMATION

**Acute Toxicity:** No data available

No known significant effects or critical hazards. Skin:

Eyes: Slightly irritating to the eyes.

No known significant effects or critical hazards. Respiratory: No known significant effects or critical hazards. Ingestion:

Carcinogenicity: No data available

Teratogenicity: No effects or critical hazards.

No known significant effects or critical hazards. Germ Cell Mutagenicity:

**Embryotoxicity:** No effects or critical hazards.

Contains material which may cause damage to the kidneys and liver. Specific Target Organ Toxicity:

[Triethanolamine]

No known significant effects or critical hazards. Reproductive Toxicity:

Respiratory/Skin Sensitization: No data available No data available Corrosivity: Sensitization: No data available Irritation: No data available Repeated Dose Toxicity: No data available





### 12 ECOLOGICAL INFORMATION

**Ecotoxicity** 

Aquatic Vertebrate: No data available Aquatic Invertebrate: No data available Terrestrial: No data available Persistence and Degradability: No data available Bioaccumulative Potential: No data available Mobility in Soil: No data available PBT and vPvB Assessment: No data available

Other Adverse Effects: No data available

Delayed (Chronic) Health Hazard: Yes Amendment and

Reauthorization Act of 1986 Fire Hazard: No

Title III (EPCRA) Section 311 & Immediate (Acute) Health Hazard: Yes

Reactive Hazard: Yes 312:

Sudden Release of Pressure Hazard: No

## **DISPOSAL CONSIDERATIONS**

This product has been evaluated for RCRA characteristics and does not meet the criteria of a Waste Residues:

hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures processes,

etc. may render the resulting materials hazardous.

Users should review their operations in terms of the applicable federal/national or local

**Product Containers:** 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 significantly change the characteristics of the material and alter the waste classification and proper disposal methods

## TRANSPORT INFORMATION

Proper Shipping Name: Environmentally hazardous substance, DOT (Dept. of Transportation, USA):

liquid, n.o.s. (Diethanolamine)

Hazard Class: 9

Identification Number: Not regulated

Packing Group: III

Label Required: Not regulated. Depending on container size, spills of this product may require reporting under SARA 304

and/or CERCLA 102(A)

TDG (Transportation of Dangerous Goods, Canada): No data available No data available IMDG (International Maritime Dangerous Goods): IATA (International Air Transport Association): No data available ICAO (International Civil Aviation Organization): No data available

### 15 REGULATORY INFORMATION

TSCA Inventory Status: No data available

DSCL (EEC): This product, or its components, are listed on or are exempt from the inventory.

WHMIS (Canada): Not regulated

**EU EINECS/ELINCS/NLP:** This product, or its components, are listed on or are exempt from the inventory.

No data available China IECSC: China IECIC (06.30.2014): No data available

Australia AICS: This product, or its components, are listed on or are exempt from the inventory. Japan MITI: This product, or its components, are listed on or are exempt from the inventory.





California Prop 65: The following detectable components of this product are substances, or belong to classes of

substances, known to the State of California to cause cancer and/or reproductive toxicity:

Diethanolamine < 0.5%

Ethanol 2.2'.2"nitrilotris Ethanol 2.2'.2"nitrilotris Ethanol 2.2'.2"nitrilotris Florida RTK: Pennsylvania RTK: Rhode Island RTK:

SARA Section 302/304 Extremely

**Hazardous Substances:** 

SARA Section 311 Hazardous Categorization:

Acute: Yes Chronic: Yes Fire: No Pressure: No

Reactive: N/A SARA Section 313 Toxic Chemical: None

CERCLA 102(A)/dot Hazardous Substances:

None

None

## OTHER INFORMATION

**Revision Date:** 10/20/2020

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Compliance:

Communication Standard 29 CFR 1910.1200

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as to the suitableness & completeness of such information for his own particular use.