

## **Safety Data Sheet**

acc. to 29 CFR 1910.1200 App D

## **Triethanolamine 75%**

Version number: GHS 3.0 Replaces version of: 2017-10-12 (2) Revision: 2023-10-26

## **SECTION 1: Identification**

#### 1.1 Product identifier

Trade name

**Triethanolamine 75%** 

CAS number

Mixture

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Industrial use

## 1.3 Details of the supplier of the safety data sheet

Level 7 Chemical 255 Sturgis Rd Conway, AR 72034 (855) 927-1777

## 1.4 Emergency telephone number

**Emergency information service** 

CHEMTREC (800) 424-9300 (AVAILABLE 24 HOURS A

DAY)

#### **SECTION 2: Hazard(s) identification**

#### 2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### 2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

not required

#### - Additional statements

0% of the mixture consists of ingredient(s) of unknown toxicity (acute oral toxicity). 0% of the mixture consists of ingredient(s) of unknown toxicity (acute dermal toxicity). 0% of the mixture consists of ingredient(s) of unknown toxicity (acute inhalative toxicity).

## 2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0.1\%$ .

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## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Name of substance Triethanolamine 75%

Identifiers

CAS No Mixture

#### 3.2 Mixtures

Name of substance	Identifier	Wt%
2-[bis(2-hydroxyethyl)amino]ethan-1-ol	CAS No 102-71-6	60 – < 75
2,2'-iminodiethanol	CAS No 111-42-2	0 – < 1

## **SECTION 4: First-aid measures**

## 4.1 Description of first-aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

## Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

## 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

## 4.3 Indication of any immediate medical attention and special treatment needed

none

## **SECTION 5: Fire-fighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

## 5.2 Special hazards arising from the substance or mixture

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#### Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

## 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

## Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

## 7.2 Conditions for safe storage, including any incompatibilities

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks or other ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

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#### Control of the effects

Protect against external exposure, such as

frost

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

## **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/ m³]	STEL [ppm]	STEL [mg/ m³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/ m³]	Nota- tion	Sourc e
US	triethanolamine	102-71-6	TLV®		5						ACGIH® 2023
US	diethanolamine	111-42-2	REL	3 (10 h)	15 (10 h)						NIOSH REL
US	diethanolamine	111-42-2	TLV®		1					iv, H	ACGIH® 2023

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

H absorbed through the skin iv inhalable fraction and vapor

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified

## 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

## Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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## SECTION 9: Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

## **Appearance**

Physical state	liquid
Color	Colorless
Odor	characteristic

## Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	98.89 °C
Flash point	>37.78 °C
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	not determined
Density	9.11 <sup>lb</sup> / <sub>gal</sub>
Vapor density	this information is not available
Relative density	1.094 (water = 1)
Solubility(ies)	not determined

## Partition coefficient

- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

# 9.2 Other information there is no additional information

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## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

## 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

#### 10.5 Incompatible materials

Oxidizers

## 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

This mixture does not meet the criteria for classification.

#### Acute toxicity

Shall not be classified as acutely toxic.

#### Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Diethanolamine	111-42-2	oral	1,100 <sup>mg</sup> / <sub>kg</sub>

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

## Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

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## IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	CAS No	Classification	Number
Diethanolamine	111-42-2	2B	
Triethanolamine	102-71-6	3	

Legend

2B Possibly carcinogenic to humans

3 Not classifiable as to carcinogenicity in humans

## Reproductive toxicity

Shall not be classified as a reproductive toxicant.

## Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

## Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

## 12.2 Persistence and degradability

Data are not available.

## 12.3 Bioaccumulative potential

Data are not available.

## 12.4 Mobility in soil

Data are not available.

## 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq$  0.1%.

#### 12.7 Other adverse effects

Data are not available.

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## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## **SECTION 14: Transport information**

#### 14.1 UN/NA Number

DOT UN 3082

14.2 UN proper shipping name

DOT Environmentally hazardous substance, liquid, n.o.s.

(Diethanolamine)

14.3 Transport hazard class(es)

DOT 9

14.4 Packing group

DOT

**14.5 Environmental hazards** not assigned

## **SECTION 15: Regulatory information**

## 15.1 Safety, health and environmental regulations specific for the product in question

## Relevant provisions of the European Union (EU)

## Restrictions according to REACH, Annex XVII

none of the ingredients are listed

## List of substances subject to authorization (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

## Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

#### Persistent organic pollutants (POP)

Not listed.

## **National regulations (United States)**

**Toxic Substance Control Act (TSCA)** all ingredients are listed (ACTIVE) or exempt from

listing

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#### Superfund Amendment and Reauthorization Act (SARA TITLE III )

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance	CAS No	Remarks	Effective date
Diethanolamine	111-42-2		1987-01-01

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
Diethanolamine	111-42-2		3	100 (45,4)

#### Legend

### **Right to Know Hazardous Substance List**

- Toxic or Hazardous Substance List (MA-TURA)
  not all ingredients are listed. Listed in: Diethanolamine. Not listed: Triethanolamine, Water
- Hazardous Substances List (MN-ERTK)
  not all ingredients are listed. Listed in: Diethanolamine, Triethanolamine. Not listed: Water
- Hazardous Substance List (NJ-RTK) not all ingredients are listed. Listed in: Diethanolamine, Triethanolamine. Not listed: Water
- Hazardous Substance List (Chapter 323) (PA-RTK) not all ingredients are listed. Listed in: Diethanolamine, Triethanolamine. Not listed: Water
- Hazardous Substance List (RI-RTK) not all ingredients are listed. Listed in: Diethanolamine, Triethanolamine. Not listed: Water

# California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

**WARNING**: This product can expose you to chemicals including diethanolamine, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Name acc. to inventory	CAS No	Type of the toxicity
diethanolamine	111-42-2	cancer

## Industry or sector specific available guidance(s)

#### **NPCA-HMIS® III**

Hazardous Materials Identification System. American Coatings Association.

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<sup>&</sup>quot;3" indicates that the source is section 112 of the Clean Air Act

Category Rating Description \* Chronic chronic (long-term) health effects may result from repeated overexposure Health 2 temporary or minor injury may occur Flammability 1 material that must be preheated before ignition can occur 0 Physical hazard material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive Personal protection

#### **NFPA® 704**

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	1	material that must be preheated before ignition can occur
Health	2	material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

## **National inventories**

Country	Inventory	Status
AU	AIIC	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
JP	CSCL-ENCS	all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed (ACTIVE)

Legend

Australian Inventory of Industrial Chemicals Chemical Inventory and Control Regulation List of Existing and New Chemical Substances (CSCL-ENCS) AIIC CICR

CSCL-ENCS

DSL

Domestic Substances List (DSL) EC Substance Inventory (EINECS, ELINCS, NLP) **ECSI** 

Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances **IECSC** 

**INSQ** Korea Existing Chemicals Inventory New Zealand Inventory of Chemicals KECI<sup>^</sup> NZIoC

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Legend

PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)

REACH Reg. REACH registered substances

TCSI Taiwan Chemical Substance Inventory

TSCA Toxic Substance Control Act

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information, including date of preparation or last revision

## **Indication of changes (revised safety data sheet)**

New 8/15/2017; Updated Composition Percentages 10/12/2017; Format & Properties Update 10/26/2023.

## Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT).

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

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