Sigma-Aldrich

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.1 Revision Date 13.12.2018 Print Date 15.02.2020 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1	Product identifiers Product name	:	Triethanolamine
	Product Number Brand REACH No. CAS-No.	:	90278 Sigma 01-2119486482-31-XXXX 102-71-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

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

Company	:	Sigma-Aldrich Chemie GmbH Eschenstrasse 5 D-82024 TAUFKIRCHEN
Telephone Fax		+49 (0)89 6513-1130 +49 (0)89 6513-1161

## **1.4 Emergency telephone number**

Emergency Phone # : 0800 181 7059 (CHEMTREC Deutschland) +49 (0)696 43508409 (CHEMTREC weltweit)

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.1 Substances

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Synonyms	:	2,2',2''-Nitrilotriethanol Tris(2-hydroxyethyl)amine
Formula Molecular weight CAS-No. EC-No.	:	C <sub>6</sub> H <sub>15</sub> NO <sub>3</sub> 149,19 g/mol 102-71-6 203-049-8

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First aid measures

## 4.1 Description of first aid measures

## If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

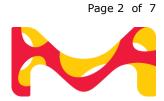
Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- **5.2** Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx)
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- **5.4 Further information** No data available

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

- **6.1 Personal precautions, protective equipment and emergency procedures** Avoid breathing vapours, mist or gas. For personal protection see section 8.
- **6.2 Environmental precautions** No special environmental precautions required.

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- **6.3 Methods and materials for containment and cleaning up** Keep in suitable, closed containers for disposal.
- **6.4** Reference to other sections For disposal see section 13.

## SECTION 7: Handling and storage

#### **7.1 Precautions for safe handling** For precautions see section 2.2.

**7.2** Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place. Store in cool place. hygroscopic

## **7.3** Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

## **Components with workplace control parameters**

## 8.2 Exposure controls

**Appropriate engineering controls** General industrial hygiene practice.

## Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nature latex/chloroprene Minimum layer thickness: 0,6 mm Break through time: 480 min Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,2 mm Break through time: 30 min Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist

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and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

No special environmental precautions required.

## **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

	•	<i>,</i> , , ,
a)	Appearance	Form: viscous Colour: colourless
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	10,5 - 11,5 at 149 g/l at 25 °C
e)	Melting point/freezing point	Melting point/range: 17,9 - 21 °C
f)	Initial boiling point and boiling range	190 - 193 °C at 7 hPa
g)	Flash point	179 °C - closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	Upper explosion limit: 8,5 %(V) Lower explosion limit: 1,3 %(V)
k)	Vapour pressure	No data available
I)	Vapour density	5,15 - (Air = 1.0)
m)	Relative density	1,124 g/mL at 25 °C
n)	Water solubility	149 g/l at 20 °C - completely soluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition	No data available

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temperature

- r) Viscosity No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

#### 9.2 Other safety information

Relative vapour 5,15 - (Air = 1.0) density

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

## **10.1 Reactivity**

No data available

- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** Air Exposure to moisture Light.
- **10.5 Incompatible materials** Acids, Oxidizing agents
- 10.6 Hazardous decomposition products
   Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx)
   Other decomposition products No data available
   In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity LD50 Dermal - Rabbit - > 22,5 g/kg

**Skin corrosion/irritation** No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitisation** No data available

**Germ cell mutagenicity** No data available

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

No data available

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Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

**Aspiration hazard** No data available

Additional Information RTECS: KL9275000

Kidney injury may occur., Dermatitis

Liver - Irregularities - Based on Human Evidence

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to daphnia EC50 - Daphnia (water flea) - 609,98 mg/l - 48 h and other aquatic invertebrates

- **12.2 Persistence and degradability** Biodegradability Result: 96 % - Readily biodegradable.
- **12.3 Bioaccumulative potential** No data available

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

#### **13.1** Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

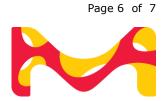
#### **14.1 UN number** ADR/RID: -

IMDG: -

IATA: -

#### **14.2 UN proper shipping name** ADR/RID: Not dangerous goods

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	IMDG: IATA:	Not dangerous goo Not dangerous goo		
14.3	Transpor ADR/RID:	t hazard class(es) -	IMDG: -	IATA: -
14.4	<b>Packagin</b> ADR/RID:		IMDG: -	IATA: -
14.5	<b>Environm</b> ADR/RID:	no no	IMDG Marine pollutant: no	IATA: no
14.6	<b>Special p</b> No data av	recautions for use vailable	r	

#### **SECTION 15: Regulatory information**

# **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

## **SECTION 16: Other information**

#### **Further information**

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