

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 08.08.2011

Version: 1.1

Product: **Triethanolamine 90% Care**

(ID no. 30054574/SDS\_COS\_EU/EN)

Date of print 09.08.2011

## 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier

## Triethanolamine 90% Care

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

Relevant identified uses: cosmetic ingredient

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Care Chemicals

Telephone: +49 621 60-48434

E-mail address: EM-Masterdata@basf.com

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Label elements

According to Regulation (EC) No 1272/2008 [CLP]

| Globally Harmonized System, EU (GHS)

| The product does not require a hazard warning label in accordance with GHS criteria.

According to Directive 67/548/EEC or 1999/45/EC

The product does not require a hazard warning label in accordance with EC Directives.

### **Classification of the substance or mixture**

According to Regulation (EC) No 1272/2008 [CLP]

**|** No need for classification according to GHS criteria for this product.

According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

No particular hazards known.

### **Other hazards**

According to Regulation (EC) No 1272/2008 [CLP]

Other Hazards (GHS):

No specific dangers known, if the regulations/notes for storage and handling are considered.

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## **3. Composition/Information on Ingredients**

### **Mixtures**

Chemical nature

INCI Name: Triethanolamine

Preparation based on: 2,2',2"-nitrilotriethanol, in water

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## **4. First-Aid Measures**

### **Description of first aid measures**

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash off thoroughly with ample water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink plenty of water.

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

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Symptoms: No significant symptoms are expected due to the non-classification of the product.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

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## **5. Fire-Fighting Measures**

### **Extinguishing media**

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

### **Special hazards arising from the substance or mixture**

Evolution of fumes/fog.

### **Advice for fire-fighters**

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

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## **6. Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures**

Handle in accordance with good industrial hygiene and safety practice. Use personal protective clothing.

### **Environmental precautions**

Discharge into the environment must be avoided.

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

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Pump off product.

Dispose of absorbed material in accordance with regulations.

### **Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## **7. Handling and Storage**

### **Precautions for safe handling**

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Keep away from sources of ignition - No smoking.

**Conditions for safe storage, including any incompatibilities**

Segregate from acids and acid forming substances.

Suitable materials for containers: carbon steel (iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), glass, Low density polyethylene (LDPE)

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

**8. Exposure Controls/Personal Protection****Control parameters**Components with workplace control parameters

| 102-71-6: 2,2',2"-nitrioltriethanol

PNEC

| freshwater: 0.32 mg/l

| marine water: 0.032 mg/l

| intermittent release: 5.12 mg/l

| STP: 10 mg/l

| sediment (freshwater): 1.7 mg/kg

| sediment (marine water): 0.17 mg/kg

| soil: 0.151 mg/kg

DNEL

| worker:

| Long-term exposure- systemic effects, dermal: 6.3 mg/kg bw/day

| worker:

| Long-term exposure - systemic and local effects, Inhalation: 5 mg/m<sup>3</sup>

| consumer:

| Long-term exposure- systemic effects, dermal: 3.1 mg/kg bw/day

| consumer:

| Long-term exposure - systemic and local effects, Inhalation: 1.25 mg/m<sup>3</sup>

| consumer:

| Long-term exposure- systemic effects, oral: 13 mg/kg bw/day

**Exposure controls**Personal protective equipment

Respiratory protection:

Respiratory protection not required.

**Hand protection:**

Chemical resistant protective gloves (EN 374)

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

**Eye protection:**

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**General safety and hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

**9. Physical and Chemical Properties****Information on basic physical and chemical properties**

Form:	liquid	
Colour:	colourless to yellow	
Odour:	amine-like	
pH value:	10.5 (15 g/l, 20 °C)	
Melting point:	21 °C	
Boiling point:	360 °C (1,013 hPa)	
Flash point:	179 °C Literature data.	(Unspecified, closed cup)
Flammability:	does not ignite	
Lower explosion limit:	3.6 %(V)	
Upper explosion limit:	7.2 %(V)	
Ignition temperature:	325 °C	(DIN 51794)
Vapour pressure:	0.00005 mbar (40 °C) 50 mbar (50 °C)	
Density:	1.12 - 1.13 g/cm <sup>3</sup> (25 °C)	
Solubility in water:	miscible > 1,000 g/l (20 °C)	(other)
Partitioning coefficient n-octanol/water (log Kow):	-2.3 (25 °C; pH value: 7.1)	(OECD Guideline 107)
Self ignition:	not self-igniting	Test type: Spontaneous self-ignition at room-temperature.
Viscosity, dynamic:	600 mPa.s (25 °C)	
Viscosity, kinematic:	830.2 mm <sup>2</sup> /s (20.5 °C)	(OECD 114)

### Other information

Self heating ability: Currently, no data available

Miscibility with water:  
(20 °C)  
miscible in all proportions

Grain size distribution: Test substance The substance / product is marketed or used in a non solid or granular form.

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.  
Formation of flammable gases: Remarks: Forms no flammable gases in the presence of water.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

Reacts with inorganic acid chlorides. Evolution of toxic gases/vapours.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

Substances to avoid:  
acid chlorides, acids, atmospheric moisture

### Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Inhalation-risk test (IRT): No mortality within 8 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard. The data on toxicology refer to the active ingredient.

Experimental/calculated data:

LD50 rat (oral): approx. 7,200 mg/kg (BASF-Test)

rat (by inhalation): 8 h (IRT)

No mortality within the stated exposition time as shown in animal studies.

| LD50 rabbit (dermal): > 2,000 mg/kg (OECD Guideline 402)

#### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes. The data on toxicology refer to the active ingredient.

Experimental/calculated data:

| Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

| Serious eye damage/irritation rabbit: non-irritant (BASF-Test)

#### Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies. The data on toxicology refer to the active ingredient.

Experimental/calculated data:

| Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

#### Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The data on toxicology refer to the active ingredient.

#### Carcinogenicity

Assessment of carcinogenicity:

| Under certain conditions the substance can form nitrosamines. Nitrosamines are carcinogenic in animal studies. The substance showed no carcinogenic activity in animals after chronic administration to the skin.

#### Reproductive toxicity

Assessment of reproduction toxicity:

| The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition. The potential to impair fertility cannot be excluded when given at maternally toxic doses. Because the relevance of the results to human health is unclear, further tests will be initiated.

#### Developmental toxicity

Assessment of teratogenicity:

| The results of animal studies gave indication of a developmental toxic/teratogenic effects with high doses. The results were determined in a Screening test (OECD 421/422). Because the relevance of the results to human health is unclear, further tests will be initiated. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

| No adverse effects were observed after repeated exposure in animal studies.

**12. Ecological Information****Toxicity**

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

The product has not been tested. The ecological data given are those of the active ingredient.

Toxicity to fish:

| LC50 (96 h) 11,800 mg/l, Pimephales promelas (Fish test acute, Flow through.)

| The product will cause changes in the pH value of the test system. The result refers to an neutralized sample. The statement of the toxic effect relates to the analytically determined concentration.

| Literature data.

Aquatic invertebrates:

| EC50 (24 h) 2,038 mg/l, Daphnia magna (Daphnia test acute)

| The details of the toxic effect relate to the nominal concentration. Literature data.

Aquatic plants:

| EC50 (72 h) 512 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static)

| The details of the toxic effect relate to the nominal concentration. The product will cause changes in the pH value of the test system. The result refers to an neutralized sample. Literature data.

Microorganisms/Effect on activated sludge:

| EC50 (180 min) &gt; 1,000 mg/l, activated sludge, domestic (OECD Guideline 209)

| The details of the toxic effect relate to the nominal concentration. Literature data.

| Toxic limit concentration (16 h) &gt; 10,000 mg/l, Pseudomonas putida (DIN 38412 Part 8, aquatic)

| The details of the toxic effect relate to the nominal concentration. Literature data.

Chronic toxicity to fish:

| Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:

| No observed effect concentration (21 d), 16 mg/l, Daphnia magna (other, semistatic)

| Literature data.

Soil living organisms:

| Study scientifically not justified.

Terrestrial plants:

| Study scientifically not justified.

Other terrestrial non-mammals:

| LC50 (3 d) 49,950 mg/kg, Drosophila melanogaster

**Persistence and degradability**

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Assessment biodegradation and elimination (H<sub>2</sub>O):

Readily biodegradable (according to OECD criteria). Literature data.

Elimination information:

90 - 100 % DOC reduction (19 d) (OECD 301E/92/69/EEC, C.4-B) (municipal sewage treatment plant effluent)

Assessment of stability in water:

According to structural properties, hydrolysis is not expected/probable.

### **Bioaccumulative potential**

Assessment bioaccumulation potential:

Does not accumulate in organisms.

Bioaccumulation potential:

Bioconcentration factor: < 0.4 (42 d), *Cyprinus carpio* (OECD Guideline 305 C)

Literature data.

### **Mobility in soil (and other compartments if available)**

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

### **Results of PBT and vPvB assessment**

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

### **Additional information**

Other ecotoxicological advice:

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The product has not been tested. The ecological data given are those of the active ingredient.

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## **13. Disposal Considerations**

### **Waste treatment methods**

Incinerate in suitable incineration plant, observing local authority regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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## **14. Transport Information**

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### Land transport

ADR

Not classified as a dangerous good under transport regulations

RID

Not classified as a dangerous good under transport regulations

### Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 15. Regulatory Information

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

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## 16. Other Information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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