

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## Sodium Sarcosinate Solution 40%

Version 1.3 / REG\_EU

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 18.08.2015

Print Date: 05.02.2022

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

#### 1.1 Product identifier

Trade name : Sodium Sarcosinate Solution 40%

Registration number : 01-2119487285-28-0005

CAS-No. : 4316-73-8

EC-No. : 224-338-5

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

Use of the Substance/Mixture : Chemical intermediate

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

Company : Alzchem Trostberg GmbH  
Dr.-Albert-Frank-Str. 32  
83308 Trostberg, Germany

Telephone : +49 8621 86-3351

E-mail address of person responsible for the SDS : alz-pst@alzchem.com

#### 1.4 Emergency telephone number

Emergency telephone number : +49 8621 86-2776  
Alzchem Trostberg GmbH, Fire Brigade

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

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Precautionary statements :

### Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

### Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.

### 2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

#### Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
Sodium Sarcosinate	4316-73-8 224-338-5	>= 39,5 - <= 40,5
Sodium Hydroxide	1310-73-2 215-185-5	>= 0,5 - <= 0,8

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Immediate medical attention is required.  
Remove contaminated or soaked clothing immediately and dispose of safely.
- If inhaled : Bring affected person outside and ensure that he/she is comfortable.
- In case of skin contact : Wash off with plenty of water and soap immediately. Call a physician immediately.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.  
Remove contact lenses if this can be easily done.  
Immediate further treatment in ophthalmic hospital/ ophthalmologist.

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If swallowed : Do NOT induce vomiting.  
Rinse out mouth.  
Drink 1 or 2 glasses of water.

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

None known.

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

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray, foam, CO<sub>2</sub>, dry powder.  
Unsuitable extinguishing media : high volume water jet

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

Hazardous combustion products : Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

## SECTION 6: Accidental release measures

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

Personal precautions : Wear personal protective equipment; see section 8.

### 6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.

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

Methods for cleaning up : Absorb with liquid-binding material, e. g.: diatomaceous earth, sand, universal binder  
Keep in suitable, closed containers for disposal.  
Large spills should be collected mechanically (remove by pumping) for disposal.

### 6.4 Reference to other sections

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

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- Advice on safe handling : Provide sufficient ventilation and exhaust at the workplace. The substance must be handled under strictly controlled conditions in accordance with Article 17/18 of the REACH regulation. Handle in accordance with good industrial hygiene and safety practice.
- Advice on protection against fire and explosion : No special precautions required.
- Hygiene measures : Do not inhale vapours / aerosols. Contact with skin, eyes and clothes must be strictly avoided Wash contact areas after handling. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink or smoke while working. Wash hands, and/or face before breaks and when workday is finished. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep in a well-ventilated place.
- Advice on common storage : Keep away from, and do not store with, acids
- Storage period : 24 Months
- Packaging material : Suitable material: stainless steel, 1.4301, 1.4541, 1.4571  
Unsuitable material: Aluminium, Zinc

### 7.3 Specific end use(s)

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

#### Personal protective equipment

- Eye protection : close-fitting protective goggles (e.g. closed goggles)
- Hand protection
- Material : Nitrile rubber, Recommendation: Camatril 730
  - Break through time : > 480 min
  - Glove thickness : 0,4 mm
  - Directive : DIN EN 374
  - Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany
- Skin and body protection : Protective clothing
- Respiratory protection : Use suitable respiratory protection where aerosols/vapours are generated.  
Dust protection mask in accordance with EN 149 FFP2

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### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: colourless - yellow
Odour	: odourless
pH	: 13 - 14
Freezing point	: < -100 °C
Boiling point/boiling range	: ca. 113 °C
Flash point	: Not applicable
Vapour pressure	: 23,4 hPa (20 °C)
Relative density	: 1,2058 (20 °C)
Density	: 1,21 g/cm <sup>3</sup> (20 °C)
Solubility(ies) Water solubility	: miscible (20 °C)
Auto-ignition temperature	: 472 °C
Decomposition temperature	: 90 °C Decomposition energy (mass): 60 J/g

#### 9.2 Other information

no data available

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

|| See section 10.3

#### 10.2 Chemical stability

|| No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with: acids

#### 10.4 Conditions to avoid

Conditions to avoid : None known.

#### 10.5 Incompatible materials

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Materials to avoid : Aluminium  
Acids  
Nitrous acid and other nitrosating agents

### 10.6 Hazardous decomposition products

|| Hazardous decomposition products formed under fire conditions.  
see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Components:

##### **Sodium Sarcosinate:**

Acute oral toxicity : LD50 (rat): > 6400 mg/kg  
Assessment: Based on available data, the classification criteria are not met.  
Remarks: IUCLID

Acute inhalation toxicity : LC0 (Rat): 3,41 mg/l  
Exposure time: 8 h  
Method: OECD Test Guideline 403  
Assessment: Based on available data, the classification criteria are not met.  
Remarks: maximum concentration in the test: no animals died.  
IUCLID

Acute dermal toxicity : Remarks: no data available  
IUCLID

##### **Sodium Hydroxide:**

Acute oral toxicity : Assessment: Based on available data, the classification criteria are not met.  
Remarks: IUCLID

Acute inhalation toxicity : Assessment: Based on available data, the classification criteria are not met.  
Remarks: IUCLID

Acute dermal toxicity : Assessment: Based on available data, the classification criteria are not met.  
Remarks: IUCLID

#### Skin corrosion/irritation

##### Product:

Assessment : Causes severe skin burns and eye damage.

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### Components:

#### **Sodium Sarcosinate:**

Species : reconstructed human epidermis (RhE)  
Assessment : Causes severe skin burns and eye damage.  
Method : OECD Test Guideline 431  
Result : corrosive  
Remarks : IUCLID

#### **Sodium Hydroxide:**

Assessment : Corrosive  
Remarks : IUCLID

### **Serious eye damage/eye irritation**

#### Product:

Assessment : Causes serious eye damage.

### Components:

#### **Sodium Sarcosinate:**

Assessment : Causes serious eye damage.  
Remarks : IUCLID

#### **Sodium Hydroxide:**

Assessment : Causes serious eye damage.  
Remarks : IUCLID

### **Respiratory or skin sensitisation**

#### Components:

#### **Sodium Sarcosinate:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : IUCLID

#### **Sodium Hydroxide:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : IUCLID

### **Germ cell mutagenicity**

#### Components:

#### **Sodium Sarcosinate:**

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test  
Remarks: IUCLID

#### **Sodium Hydroxide:**

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Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.  
Remarks: IUCLID

### Carcinogenicity

#### Components:

##### **Sodium Sarcosinate:**

Carcinogenicity - Assessment : no data available  
Remarks: IUCLID

##### **Sodium Hydroxide:**

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.  
Remarks: IUCLID

### Reproductive toxicity

#### Components:

##### **Sodium Sarcosinate:**

Reproductive toxicity - Assessment : no data available  
Remarks: IUCLID

##### **Sodium Hydroxide:**

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.  
Remarks: IUCLID

### STOT - single exposure

#### Components:

##### **Sodium Sarcosinate:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : IUCLID

##### **Sodium Hydroxide:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : IUCLID

### STOT - repeated exposure

#### Components:

##### **Sodium Sarcosinate:**

Assessment : Based on available data, the classification criteria are not met.  
Remarks : IUCLID

##### **Sodium Hydroxide:**

Assessment : Based on available data, the classification criteria are not met.



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Remarks : IUCLID

### Aspiration toxicity

#### Components:

##### **Sodium Sarcosinate:**

Based on available data, the classification criteria are not met.

Remarks : IUCLID

##### **Sodium Hydroxide:**

Based on available data, the classification criteria are not met.

Remarks : IUCLID

### Further information

#### Product:

Remarks : No additional toxicological data are available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **Sodium Sarcosinate:**

Toxicity to fish : LC50 (Leuciscus idus): > 10000 mg/l  
Exposure time: 96 h  
Test substance: This information is derived from evaluation of  
or a test result for a similar compound (conclusion based on  
analogy).  
Method: DIN 38412 Teil 15  
Remarks: IUCLID

Toxicity to daphnia and other : EC50 (Daphnia magna): > 500 mg/l  
aquatic invertebrates  
Exposure time: 48 h  
Method: Directive 79/831 EEC  
Remarks: IUCLID

Toxicity to algae/aquatic : EC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l  
plants  
End point: growth rate  
Exposure time: 72 h  
Method: DIN 38412, T.9  
Remarks: IUCLID

Toxicity to microorganisms : EC 20 (local activated sludge): > 1000 mg/l  
Exposure time: 0,5 h  
Method: OECD 209  
Remarks: IUCLID

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### Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

### Sodium Hydroxide:

Toxicity to fish : LC50 (estimation) (Fish): > 100 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia sp.): 40,4 mg/l  
Exposure time: 48 h  
Remarks: IUCLID

## 12.2 Persistence and degradability

### Components:

#### Sodium Sarcosinate:

Biodegradability : Biodegradation: 90 - 100 %  
Exposure time: 14 d  
Remarks: Readily biodegradable.

Biochemical Oxygen Demand (BOD) : 710 mg/g  
Incubation time: 5 d

## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

## 12.5 Results of PBT and vPvB assessment

### Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

## 12.6 Other adverse effects

### Product:

Additional ecological information : No further ecotoxicological data are available.

### Components:

#### Sodium Hydroxide:

Additional ecological information : The product may be harmful to aquatic organisms by pH-shift.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

- Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.
- Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

### SECTION 14: Transport information

#### 14.1 UN number

- ADR : UN 3267
- RID : UN 3267
- IMDG : UN 3267
- IATA : UN 3267

#### 14.2 UN proper shipping name

- ADR : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Sodium sarcosinate)
- RID : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Sodium sarcosinate)
- IMDG : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Sodium sarcosinate)
- IATA : Corrosive liquid, basic, organic, n.o.s.  
(Sodium sarcosinate)

#### 14.3 Transport hazard class(es)

- ADR : 8
- RID : 8
- IMDG : 8
- IATA : 8

#### 14.4 Packing group

- ADR
- Packing group : II
- Classification Code : C7
- Hazard Identification Number : 80
- Labels : 8
- Tunnel restriction code : (E)
- RID
- Packing group : II
- Classification Code : C7

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Hazard Identification Number : 80  
Labels : 8

### IMDG

Packing group : II  
Labels : 8  
EmS Code : F-A, S-B  
Remarks : Clear of living quarters.  
Keep separate from acids.

### IATA (Cargo)

Packing instruction (cargo aircraft) : 855  
Packing instruction (LQ) : Y840  
Packing group : II  
Labels : Class 8 - Corrosive substances  
Remarks : ERG-Code 8L

### IATA\_P (Passenger)

Packing instruction (passenger aircraft) : 851  
Packing instruction (LQ) : Y840  
Packing group : II  
Labels : Class 8 - Corrosive substances  
Remarks : ERG-Code 8L

## 14.5 Environmental hazards

### ADR

Environmentally hazardous : no

### RID

Environmentally hazardous : no

### IMDG

Marine pollutant : no

## 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

### 15.2 Chemical safety assessment

No substance safety assessment is required for this product because it is an internal local intermediate product and/or a transported intermediate product.

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### SECTION 16: Other information

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

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