

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

COCO-BETAINE SURFACTANT

1. Identification of the substance/mixture and company

Trade name: Coco-betaine surfactant, powder
Fatty acid amido alkyl betaine
I.N.C.I. Cocamidopropyl Betaine
Utilization: Raw material for cosmetic and industrial use
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania
Tel/Fax: +40259-436.755, www.elemental.eu
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606
Institutul de Sănătate Publică București.
International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

According to Hazardous Products Regulations

Health Hazards

Acute toxicity (Oral) - Category 5

Serious Eye Damage/Eye Irritation - Category 1

Unknown toxicity - Health

Acute toxicity, dermal - 0 %

Acute toxicity, inhalation, vapor - 15 %

Acute toxicity, inhalation, dust or mist - 15 %

Environmental Hazards

Acute hazards to the aquatic environment - Category 2

Chronic hazards to the aquatic environment - Category 3

Unknown toxicity - Environment

Acute hazards to the aquatic environment - 0 %

Chronic hazards to the aquatic environment - 0 %

2.2 Label elements

Hazard pictograms:



Signal Word: Danger

Hazard statement:

May be harmful if swallowed.

Causes serious eye damage.

Toxic to aquatic life.

Harmful to aquatic life with long lasting effects

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Precautionary statement:

Prevention: Avoid release to the environment. Wear eye protection/face protection.

Response: Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards None known.

3. Declaration of ingredients

Chemical name: Fatty acid amido alkyl betaine

Mixtures

Chemical Identity	C.A.S.	Content in percent (%)*
1-Propanaminium, N(carboxymethyl)-N,N-dimethyl-3-[(1-oxododecyl)amino]-, inner salt	4292-10-8	>=30 - <50%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxotetradecyl)amino]-, inner salt	59272-84-3	>=10 - <20%
sodium chloride	7647-14-5	>=10 - <20%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxooctadecyl)amino]-, inner salt	6179-44-8	>=1 - <10%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxohexadecyl)amino]-, inner salt	32954-43-1	>=1 - <10%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxododecyl)amino]-, inner salt	4292-10-8	48%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxotetradecyl)amino]-, inner salt	59272-84-3	16%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxooctadecyl)amino]-, inner salt	6179-44-8	8%
1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxohexadecyl)amino]-, inner salt	32954-43-1	8%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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4. First aid measures

4.1 Description of first aid measures

General information: Change soaked clothing

Inhalation: Ensure supply of fresh air.

Skin Contact: In case of contact with skin wash off immediately with plenty of water Consult a doctor if skin irritation persists.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice

Ingestion: drink large quantities of water, do not induce vomiting; consult a physician - show this data sheet.

Personal Protection for First-aid Responders: Do not inhale explosion and/or combustion gases, Use self-contained breathing apparatus and wear protective suit

4.2 Main symptoms and effects, both acute and delayed

Symptoms: No information is on file to date regarding acute and/or delayed post-exposure symptoms and effects.

Hazards: No data available.

4.3 Indication to consult a physician immediately or any special treatments

Treat symptomatically. In case of illness contact your physician immediately.

5. Fire fighting measures

5.1 Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released: - carbon dioxide, carbon monoxide - Nitrogen oxides (NOx)

5.3 Recommendations for fire-fighters

Special fire fighting procedures: Take action to prevent static discharges. Keep away from sources of ignition - no smoking. Avoid deposition of dust. Avoid formation of dust Cool endangered containers by water spray

Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases Use self-contained breathing apparatus and wear protective suit

6. Accidental release measures

6.1 Personal precautions, protective devices and emergency procedures

Use personal protective equipment

6.2 Environmental precautions

Do not allow to enter drains or waterways Do not discharge into the subsoil/soil.

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6.3 Methods and materials for containment and remediation

Pick up mechanically Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

Disposal of the contaminated material must be carried out in accordance with the provisions of point 13.

7. Handling and storage

7.1 Precautions for safe handling

Do not inhale dust Avoid contact with skin and eyes. Avoid raising dust

7.2 Conditions for safe storage, including any incompatibilities

The product is highly hygroscopic. The product is to be transported and stored at < 25°C. Use contents of opened containers immediately.

7.3 Specific end uses

None.

8. Exposure controls / personal protection

8.1 Control parameters

Observe national threshold limit values. None of the components have assigned exposure limits.

8.2 Exposure controls



Eye/face protection:

goggles, or face shield if necessary

Skin Protection

Hand Protection:

Material: gloves made of nitril (NBR)

Break-through time: 480 min

Material: gloves made of natural latex

Break-through time: 480 min

Material: gloves made of chloroprene (CR, e.g. Neoprene)

Break-through time: 480 min

Material: gloves made of butyl (IIR)

Break-through time: 480 min

Material: protective gloves made of fluorinated rubber (FKM, e.g. Viton)

Break-through time: 480 min

Other:

light protective clothing

Respiratory Protection:

in case of formation of vapours/dusts: Short term: filter apparatus, Filter P1

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Hygiene measures:

Remove soiled or soaked clothing immediately. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

9.1 Information on physical and chemical properties

Appearance: solid

Color: colorless to yellowish

Odor: characteristic

Odor threshold: Not measured

pH: 4,5 - 5,5 (100 g/l, 20 °C) Water.

Melting point / freezing point: Not measured

Initial boiling point and boiling range: Not measured

Flash point: NA

Evaporation rate: Not measured

Flammability (solid, gas): NA

Upper / lower flammability or explosive limits: NA

Vapor tension: Not measured

Vapor density: Not measured

Solubility in water: soluble

Partition coefficient: n-octanol / water: Not measured

Auto-ignition temperature: from 220 °C (VDI 2263 (Grewer))

Decomposition temperature: (DSC) No decomposition up to 400 °C

Viscosity: NA

Explosive properties: Dusts of the product are explosible

Oxidizing properties: Not to be expected in view of the structure

9.2 Other information

Bulk density: 300 kg/m³

Dust Explosion Limit, Upper: NA

Dust Explosion Limit, Lower: NA

Minimum ignition temperature: NA

Metal Corrosion: Not measured

Burning Number: VDI 2263

Self Ignition Temperature: 220 °C

10. Stability and reactivity

Stable under normal conditions of use.

10.1 Responsiveness

See section "Possibility of dangerous reactions".

10.2 Chemical stability

The product is stable under normal conditions.

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10.3 Possibility of dangerous reactions

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

10.4 Conditions to avoid

None with proper storage and handling.

10.5 Incompatible materials

Unknown.

10.6 Hazardous decomposition products

None with proper storage and handling.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure Inhalation: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Skin Contact: Relevant route of exposure. Information on effects are given below.

Eye contact: Relevant route of exposure. Information on effects are given below.

Ingestion: If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Acute toxicity information:

- Oral (mg / kg): LD 50 (rat (male/female)): 2.335 mg/kg [Main component(s)] (analogy)

- Inhalation (mg / kg): No data available. Not classified for acute toxicity based on available data.

- Cutaneous (mg / kg): No data available. Not classified for acute toxicity based on available data.

- Repeated dose toxicity:

Remarks: NOEL (rat (male/female), oral (gavage)): 300 mg/kg. This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy). Figure relates to the main component NOEL (rat (male/female), Oral): 247 mg/kg. This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy). Figure relates to the main component.

- Skin Corrosion/Irritation: slight irritant effect - does not require labeling.

Remarks: OECD 404 (Rabbit): slight irritant effect - does not require labeling Figure relates to the main component

- Serious Eye Damage/Eye Irritation: Corrosive

Remarks: OECD 405 (Rabbit): Corrosive Figure relates to the main component.

- Respiratory or Skin Sensitization: Not sensitizing in the maximum-dose test on guinea pigs.

Remarks: OECD 406 (Guinea Pig) Not sensitizing in the maximum-dose test on guinea pigs. Figure relates to the main component.

- Carcinogenicity: No data available.

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- Germ Cell Mutagenicity

In vitro:

Remarks: Ames test: negative Information refers to the main component. gene mutation test (OECD 476): negative Information refers to the main component.

In vivo:

Remarks: Chromosomal aberration (OECD 474) Intraperitoneal (Mouse, male/female): negative Information refers to the main component.

-Reproductive toxicity Product: No data available.

-Specific Target Organ Toxicity - Single Exposure Product: No data available.

-Specific Target Organ Toxicity - Repeated Exposure Product: No data available.

-Aspiration Hazard Product: Not classified.

Other effects: The substance has no mutagenic activity (Ames Test) The toxicological data given are by analogy

12. Ecological information

12.1 Toxicity

Acute hazards to the aquatic environment:

-Fish

Remarks: LC 50 (sheepshead bream, 96 h): 1,11 mg/l. Figure relates to the main component.

-Aquatic Invertebrates

Remarks: EC 50 (Daphnia magna, 48 h): 6,5 mg/l. Figure relates to the main component.

Chronic hazards to the aquatic environment:

-Fish

Remarks: (Rainbow Trout, 100 d): 0,135 mg/l. Information refers to the main component.

-Aquatic Invertebrates

Remarks: NOEC (Daphnia magna, 21 d): 0,32 mg/l. Information refers to the main component. LOEC (Daphnia magna, 21 d): 0,56 mg/l. Information refers to the main component.

-Toxicity to Aquatic Plants

Remarks: EC 50 (Desmodesmus subspicatus (green algae), 72 h): approx. 1,5 mg/l. Figure relates to the main component.

12.2 Persistence and degradability

-Biodegradation

Remarks: aerobic (28 d, OECD 301 B): 92 % Readily biodegradable (analogy), anaerobic (60 d, OECD 311): 80 - 90 % (analogy).

-BOD/COD Ratio: No data available.

12.3 Bioaccumulation potential

No data available.

12.4 Ground mobility

No data available.

Partition Coefficient n-octanol / water (log Kow): Not measured.

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Known or predicted distribution to environmental compartments

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxododecyl)amino]-, inner salt: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxotetradecyl)amino]-, inner salt: No data available.

sodium chloride: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxooctadecyl)amino]-, inner salt: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxohexadecyl)amino]-, inner salt: No data available.

Known or predicted distribution to environmental compartments

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxododecyl)amino]-, inner salt: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxotetradecyl)amino]-, inner salt: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxooctadecyl)amino]-, inner salt: No data available.

1-Propanaminium, N(carboxymethyl)-N,Ndimethyl-3-[(1oxohexadecyl)amino]-, inner salt: No data available.

12.5 Other adverse effects

Do not allow to enter soil, waterways or waste water canal. The product is classified as slightly hazardous to waters (according to the German Regulation on the Classification of Substances Hazardous to Waters (WwSV)).

13. Disposal considerations

13.1 Waste treatment methods

Disposal methods: In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

14.1 International Regulations

UNRTDG: Not regulated as a dangerous good.

IMDG: Not regulated as a dangerous good.

IATA: Not regulated as a dangerous good.

14.2 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable for product as supplied.

15. Regulatory information

Regulations and legislation on health, safety and environment specific to the substance or mixture

International regulations

Montreal protocol: Not applicable

Stockholm convention: Not applicable

Rotterdam convention: Not applicable

Kyoto protocol: Not applicable

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16. Additional information

16.1 Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.