1. PRODUCT

1.1 Product identifiers

Name: N-Lauroylsarcosine sodium salt

CAS-No.: 137-16-6

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

Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Inhalation (Category 2), H330

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

| Pictogram | |
|-------------------------------|--|
| Signal word | Danger |
| Hazard statement(s) | H315 Causes skin irritation. H318 Causes serious eye damage. H330 Fatal if inhaled. |
| Precautionary statement(s) | P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection. P284 Wear respiratory protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 or doctor/ physician. P320 Specific treatment is urgent (see supplemental first aid instructions on this label). P332 + P313 If skin irritation occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Synonyms: | N-Dodecanoyl-N-methylglycine Sarkosyl NL |
|-----------|---|
| Formula: | C ₁₅ H ₂₈ NNaO ₃ |
| CAS-No.: | 137-16-6 |
| EC-No.: | 205-281-5 |

Hazardous components

| Component | Classification | Concentration |
|-----------------------------|---|---------------|
| Sodium N-lauroyIsarcosinate | | |
| e fi | Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; H315, H318, H330 | 90 -100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

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

4.2 Indication of any immediate medical attention and special treatment needed

no data available

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), Sodium oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for

disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Ensure all equipment is electrically grounded

before beginning transfer operations.

Provide appropriate exhaust ventilation at places where dust is formed.

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.

hygroscopic Store under inert gas. Keep in a dry place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

| Eye/face protection | Face shield and safety glasses 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. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, 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 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 | Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Respiratory protection | Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |

| Control of | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
|------------|--|
| environmen | |
| tal | |
| exposure | |
| | |

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance | Form: powder Colour: white |
|--|---|
| Odour | no data available |
| Odour Threshold | no data available |
| рН | 7.0 - 9 at 293 g/l at 25 °C (77 °F) |
| Melting point/freezing point | Melting point/freezing point: 146.1 °C (295.0 °F) at 1,013 hPa (760 mmHg) |
| Initial boiling point and boiling range | 350 - 410 °C (662 - 770 °F) at 1,013 hPa (760 mmHg) |
| Flash point | 267 °C (513 °F) - closed cup |
| Evaporation rate | no data available |
| Flammability (solid, gas) | no data available |
| Upper/lower flammability or explosive limits | no data available |
| Vapour pressure | 0.02 hPa (0.02 mmHg) at 20 °C (68 °F) |
| Vapour density | no data available |
| Relative density | 1.141 g/cm3 at 20 °C (68 °F) |
| Water solubility | 293 g/l at 20 °C (68 °F) - completely soluble |
| Partition coefficient: n-octanol/water | no data available |
| Auto-ignition temperature | no data available |
| Decomposition temperature | no data available |
| Viscosity | no data available |
| Explosive properties | no data available |
| Oxidizing properties | no data available |

9.2 Other safety information

Bulk density: 400 kg/m3

Surface tension: 40.5 mN/m at 20 °C (68 °F)

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

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| Acute toxicity | |
|---|--|
| LD50 Oral - rat - male and female - > 5,000 mg/kg | |
| (OECD Test Guideline 401) | |
| LC50 Inhalation - rat - 4 h - 0.05 - 0.5 mg/l Dermal: no data available | |
| no data available | |
| Skin corrosion/irritation | |
| Skin - rabbit Result: Irritating to skin. | |
| Serious eye damage/eye irritation | |
| Eyes - rabbit | |
| Result: Risk of serious damage to eyes. (OECD Test Guideline 405) | |
| Respiratory or skin sensitisation | |
| Maximisation Test - guinea pig Result: Does not cause skin sensitisation. | |
| Germ cell mutagenicity | |
| no data available | |
| Chromosome aberration test in vitro | |
| Human lymphocytes Result: negative | |
| 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. | |
| ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. | |
| NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a | |
| known or anticipated carcinogen by NTP. | |
| OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. | |
| Reproductive toxicity | |
| no data available | |
| no data available | |
| 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 | |
| Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 30 mg/kg RTECS: Not available | |
| Cough, wheezing, respiratory difficulties, Diarrhoea, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. | |
| | |
| | |

12. ECOLOGICAL INFORMATION

12.1 Toxicity

| 2.2 Persistence and degr | adability |
|---|--|
| Toxicity to bacteria | Respiration inhibition NOEC - Sludge Treatment - 100 mg/l - 3 h (OECD Test Guideline 209) |
| Toxicity to algae | static test EC50 - Desmodesmus subspicatus (green algae) - 79 mg/l - 72 h (OECD Test Guideline 201) |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization LC50 - Daphnia magna (Water flea) - 29.7 mg/l - 48 h (OECD Test Guideline 202) |
| Toxicity to fish | semi-static test EC50 - Danio rerio (zebra fish) - 107 mg/l - 96 h (OECD Test Guideline 203) |

12.2 Persistence and degradability

| Biodegradability | aerobic - Exposure time 28 d Result: 82 % - 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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 2811 Class: 6.1 Packing group: II

Proper shipping name: Toxic solids, organic, n.o.s. ()

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. ()

Marine pollutant: No

ΙΑΤΑ

UN number: 2811 Class: 6.1 Packing group: II

Proper shipping name: Toxic solid, organic, n.o.s. ()

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

| Component | CAS-No. | Revision Date |
|-----------------------------|----------|---------------|
| Sodium N-lauroylsarcosinate | 137-16-6 | |

New Jersey Right To Know Components

| Component | CAS-No. | Revision Date |
|-----------------------------|----------|---------------|
| Sodium N-lauroylsarcosinate | 137-16-6 | |

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Eye Dam. Serious eye damage

H315 Causes skin irritation.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

Skin Irrit. Skin irritation

HMIS Rating

Health hazard: 4

Chronic Health Hazard:

Flammability: 1

Physical Hazard 0

NFPA Rating

Health hazard: 4

Fire Hazard: 1

Reactivity Hazard: 0