

Material safety data sheet
According to EU Regulation 1907/2006 in the current version
SCS SURFACTANT

1. Identification of the substance/mixture and company

Trade name: SCS SURFACTANT
Naturally derived anionic surfactant
INCI Sodium coco-sulfate
CAS No. : 68955-19-1
EINECS No. : 273-257-1
REACH pre-registration No. : -
Utilization: Raw material for cosmetic or professional 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 UN GHS criteria

Acute Tox. 5 (oral)

Skin Corr./Irrit. 2

Eye Dam./Irrit. 1

Aquatic Acute 3

Aquatic Chronic 3

Specific Concentration Limits According to UN GHS Criteria

Eye Dam./Irrit. 2: 10 - < 20 %

Eye Dam./Irrit. 1: >= 20 %

For the classifications not written out in full in this section the full text can be found in section 16.

2.2 Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word: Danger

Hazard Statement:

H318	Causes serious eye damage.
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H315	Causes skin irritation.
H303	May be harmful if swallowed.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P273	Avoid release to the environment.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P362	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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According to UN GHS criteria

Hazard determining component(s) for labeling: Sulfuric acid, mono-C12-18 (even numbered)-alkyl esters, sodium salts

2.2 Other hazards

According to UN GHS criteria

Fine dust produced by abrasion can form explosive mixtures with air.

3. Declaration of ingredients

3.1 Substances

Chemical nature: Sulfuric acid, mono-C12-18-alkyl esters, sodium salts, CAS Number: 68955-19-1, EC-Number: 273-257-1

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3.2 Mixtures

Not applicable

4. First aid measures

4.1 Description of first aid measures

If adverse health effects develop seek medical attention.

If inhaled: Fresh air.

On skin contact: After contact with skin, wash immediately with plenty of water. Change contaminated clothing and shoes.

On contact with eyes:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

On ingestion: Drink 1-2 glasses of water, do not induce vomiting, administer an anti-foaming agent (sab simplex), seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far.

Hazards: No hazard is expected under intended use and appropriate handling.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media: water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

5.2 Special hazards arising from the substance or mixture

Harmful vapors.

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3 Advice for fire-fighters

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

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Forms slippery surfaces with water

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

6.2 Environmental precautions

Do not discharge into drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of.

Avoid raising dust. Dispose of absorbed material in accordance with regulations.

7. Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion: Avoid dust formation. Take precautionary measures against static discharges.

Avoid all sources of ignition: heat, sparks, open flame.

7.2 Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Paper/Fibreboard, Polypropylene (PP), High density polyethylene (HDPE)

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Store protected against freezing.

Storage stability:

Storage temperature: 20 - 30 °C

Protect from temperatures below: 0 °C

Below the temperature limit, the product is no longer pumpable.

Protect from temperatures above: 50 °C

Properties of the product change irreversibly on exceeding the limit temperature.

7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure controls / personal protection

8.1 Control parameters

Components with occupational exposure limits: No occupational exposure limits known.

8.2 Exposure controls

Personal protective equipment:

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Respiratory protection: Breathing protection if breathable aerosols/dust are formed.

Hand protection: Suitable are protective gloves with the following specification. The recommendation is valid for laboratory conditions, specific workplace conditions must be taken into consideration separately. Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): fluoroelastomer (Viton)

Eye protection: Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection: Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: granules

Color: white

Odor: odorless

Odor threshold: not applicable, odor not perceivable

pH value: 10 - 11 (water, 20 °C)

melting range: 36 - 183 °C

decomposition point: > 208 °C The substance / product decomposes.

Boiling point: 208 °C

Flash point: > 160 °C

Evaporation rate: The product is a non-volatile solid

Flammability: not flammable

Flammability of Aerosol Products: not applicable, the product does not form flammable aerosols

Lower explosion limit: For solids not relevant for classification and labeling.

Upper explosion limit: For solids not relevant for classification and labeling.

Ignition temperature: 250 °C

Vapor pressure: < 0,001 mbar (25 °C)

Relative vapor density (air): not applicable

Solubility in water: soluble > 250 g/l (20 °C)

Solubility (qualitative) solvent(s): distilled water soluble

Partitioning coefficient n-octanol/water (log Kow): -2,1 (20 °C)

Self ignition: Temperature: 220 °C

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Viscosity, dynamic: not applicable, the product is a solid

Viscosity, kinematic: not applicable, the product is a solid

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Explosion hazard: not explosive
Fire promoting properties: not fire-propagating
Self heating ability: It is not a substance capable of spontaneous heating.
Bulk density: 550 - 650 kg/m³

9.2 Other Information

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

None if used for intended purpose.

10.4 Conditions to avoid

See MSDS section 7 - Handling and storage

10.5 Incompatible materials

Substances to avoid: No substances known that should be avoided

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products known

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact.

Virtually nontoxic by inhalation.

Of low toxicity after single ingestion.

Experimental/calculated data:

LD50 (oral): > 2.000 - 5.000 mg/kg

LD50 rabbit (dermal): > 2.000 mg/kg

Irritation

Assessment of irritating effects:

May cause severe damage to the eyes.

Skin contact causes irritation.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

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Serious eye damage/irritation rabbit: irreversible damage (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Experimental/calculated data:

No sensitizing effect.

Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Assessment of mutagenicity:

Experimental/calculated data:

Mutagenicity tests revealed no genotoxic potential.

Ames-test Bacteria: negative (OECD Guideline 471)

Carcinogenicity

Assessment of carcinogenicity:

The whole accesable information provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

Assessment of repeated dose toxicity:

The information available on the product provides no indication of toxicity on target organs after repeated exposure.

Aspiration hazard

No aspiration hazard expected.

12. Ecological information

12.1 Toxicity

Assessment of aquatic toxicity:

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

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Toxicity to fish:	LC50 (96 h) > 10 - 100 mg/l, Cyprinus carpio (OECD 203; ISO 7346; 84/449/EEC, C.1, semistatic)
Aquatic invertebrates:	EC50 (48 h) > 10 - 100 mg/l, Daphnia magna (Directive 84/449/EEC, C.2, static)
Aquatic plants:	EC50 (72 h) > 10 - 100 mg/l (growth rate), Scenedesmus subspicatus (Guideline 92/69/EEC, C.3, static)
Microorganisms/Effect on activated sludge:	EC ₅₀ > 100 mg/l, Pseudomonas putida (OECD Guideline 209)
Chronic toxicity to fish:	No observed effect concentration > 0,1 - 1 mg/l, Pimephales promelas (Flow through.) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Chronic toxicity to aquatic invertebrates:	No observed effect concentration > 0,1 - 1 mg/l. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12.2 Persistence and degradability

Assessment biodegradation and elimination (H₂O): Readily biodegradable (according to OECD criteria).

Elimination information: (Annex III , part A) The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

Assessment bioaccumulation potential: Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

12.4 Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: Adsorption to solid soil phase is expected.

12.5 Results of PBT and vPvB assessment

According to Annex XIII 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.

12.6 Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7 Additional information

Adsorbable organically-bound halogen (AOX): This product contains no organically-bound halogen.

13. Disposal considerations

13.1 Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

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14. Transport information

14.1 Land transport

ADR

Not classified as a dangerous good under transport regulations	
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

Not classified as a dangerous good under transport regulations	
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

14.2 Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations	
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known
Transport in inland waterway vessel:	Not evaluated

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14.3 Sea transport

IMDG

Not classified as a dangerous good under transport regulations	
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

14.4 Air transport

Not classified as a dangerous good under transport regulations	
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

14.5 UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

14.6 UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.7 Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.8 Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.9 Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

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14.10 Special precautions for user See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.11 Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

15. Regulatory information

15.1 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.

16. Additional information

Information on intended use: This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

16.1 Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic

16.2 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.

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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.