

Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 21.08.2019

Product: **Kolliphor® SLS**

Version: 3.3

(ID no. 30569546/SDS_GEN_00/EN)

Date of print 22.08.2019

1. Identification

Product identifier

Kolliphor® SLS

Chemical name: Sodium dodecyl sulphate

CAS Number: 151-21-3

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

Relevant identified uses: pharmaceutical excipient

Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

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2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 4 (oral)

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Acute Tox. 5 (dermal)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
Aquatic Acute 2
Aquatic Chronic 3

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

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word:

Danger

Hazard Statement:

H318	Causes serious eye damage.
H315	Causes skin irritation.
H313	May be harmful in contact with skin.
H302	Harmful if swallowed.
H412	Harmful to aquatic life with long lasting effects.
H401	Toxic to aquatic life.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P273	Avoid release to the environment.
P270	Do not eat, drink or smoke when using this product.
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.
P301 + P330	IF SWALLOWED: rinse mouth.
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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Other hazards

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According to UN GHS criteria

Fine dust produced by abrasion can form explosive mixtures with air. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

3. Composition/Information on Ingredients

Substances

Chemical nature

Sodium dodecyl sulphate

CAS Number: 151-21-3

EC-Number: 205-788-1

Ph.Eur.: Sodium Dodecyl Sulphate

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

Mixtures

Not applicable

4. First-Aid Measures

Description of first aid measures

| Remove contaminated clothing.

If inhaled:

| Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

| Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

| Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

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Symptoms: Additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

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

Extinguishing media

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

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

carbon oxides, harmful vapours
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
Cool endangered containers with water-spray.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8.
Avoid dust formation. Ensure adequate ventilation. Do not breathe dust. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater. Inform authorities in the event of product spillage to water courses or sewage systems.

Methods and material for containment and cleaning up

Pick up with suitable appliance and dispose of. Dispose of absorbed material in accordance with regulations. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation. Provide exhaust ventilation if dust is formed. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

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

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

Control parameters

Components with occupational exposure limits

7757-82-6: Sodium sulphate

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

Hand protection:

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

fluoroelastomer (FKM) - 0.7 mm coating thickness

butyl rubber (butyl) - 0.7 mm coating thickness

polyvinylchloride (PVC) - 0.7 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

chloroprene rubber (CR) - 0.5 mm coating thickness

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.

Manufacturer's directions for use should be observed because of great diversity of types.

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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. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Ensure adequate ventilation.

No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

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

Form:	granules	
Colour:	white	
Odour:	odourless	
Odour threshold:	not determined	
pH value:	9,1 (1 %(m))	
Melting point:	205 °C (1,013 hPa)	
decomposition point:	Literature data. > 216 °C (1,022 hPa) The substance / product decomposes.	(OECD Guideline 103)
Flash point:	170 °C	(Directive 92/69/EEC, A.9)
Flammability:	not highly flammable	(derived from flash point)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Vapour pressure:	0,0018 mbar (20 °C)	(Directive 84/449/EEC, A.4)
Density:	0,63 g/ml	
Relative density:	0,63 (20 °C)	(Directive 92/69/EEC, A.3)
Solubility in water:	> 130 g/l (20 °C)	(OECD Guideline 105)

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Solubility (qualitative) solvent(s):	distilled water soluble	
Partitioning coefficient n-octanol/water (log Kow):	<= -2,03 (20 °C)	(Directive 84/449/EEC, A.8)
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, kinematic:	not applicable, the product is a solid	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

Other information

Burning rate:	3,7 mm/s, 27 s	(Directive 84/449/EEC, A.10)
Self heating ability:	It is not a substance capable of spontaneous heating.	
Bulk density:	500 - 700 kg/m ³	(DGF-H-II 1b)
pKA:	1,31 (2 g/l, 20 °C)	(OECD Guideline 112)
Grain size distribution:	particles 600 µm	10 %
	particles 1042 µm	50 %
	particles 1329 µm	90 %

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.

Chemical stability

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

Possibility of hazardous reactions

None if used for intended purpose.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge. Avoid dust formation. See MSDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

No substances known that should be avoided.

Hazardous decomposition products

:
No hazardous decomposition products known.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Of moderate toxicity after single ingestion. Of low toxicity after short-term skin contact.

Experimental/calculated data:
LD50 rat (oral): 1.200 mg/kg (OECD Guideline 401)

(by inhalation): No data available.

| LD50 rabbit (dermal): > 500 mg/kg act. ingr. (similar to OECD guideline 402)
An aqueous solution was tested.

| LD50 other (dermal): > 2.000 mg/kg (other)
Estimation

Irritation

Assessment of irritating effects:
Skin contact causes irritation. May cause severe damage to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (similar to OECD guideline 404)

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

Respiratory/Skin sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:
No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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

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

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Repeated oral exposure to large quantities may affect certain organs.

Aspiration hazard

No aspiration hazard expected.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. Harmful to aquatic organisms based on long-term (chronic) toxicity study data.

Toxicity to fish:

LC50 (96 h) 29 mg/l, *Pimephales promelas* (OECD Guideline 203, Flow through.)
The details of the toxic effect relate to the nominal concentration.

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LC50 (96 h) 4,1 mg/l, *Cyprinodon variegatus* (other, static)
The statement of the toxic effect relates to the analytically determined concentration.

Aquatic invertebrates:

LC50 (48 h) 5,55 mg/l, *Ceriodaphnia dubia* (Daphnia test acute, Flow through.)

LC50 (48 h) 3,15 mg/l, *Artemia salina* (other, static)

Aquatic plants:

EC50 (72 h) > 120 mg/l (growth rate), *Desmodesmus subspicatus* (DIN 38412 Part 9, static)
The details of the toxic effect relate to the nominal concentration.

No observed effect concentration (96 h) 30 mg/l (biomass), *Scenedesmus subspicatus* (DIN 38412 Part 9, static)
The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge:

EC50 (3 h) 135 mg/l, activated sludge, domestic (Oxygen consumption test, aquatic)
The details of the toxic effect relate to the nominal concentration.

EC10 (16 h) 1.084 mg/l, *Pseudomonas putida* (DIN 38412 Part 8, aquatic)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish:

No observed effect concentration (42 d) \geq 1,36 mg/l, *Pimephales promelas* (other, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (7 d) 0,88 mg/l, *Ceriodaphnia dubia* (other, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Assessment of terrestrial toxicity:

Toxic effects have been observed in studies with terrestrial plants.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Readily biodegradable (according to OECD criteria).

Elimination information:

95 % CO₂ formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, C.4-C) (aerobic, activated sludge, domestic, non-adapted) Based on OECD criteria the product is readily biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential:

Does not accumulate in organisms.

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Mobility in soil

Assessment transport between environmental compartments:

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

Adsorption in soil: Adsorption to solid soil phase is not expected.

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 fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

Other adverse effects

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

13. Disposal Considerations

Waste treatment methods

Observe national and local legal requirements.

14. Transport Information

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

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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

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

Air transport

IATA/ICAO

	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 bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated

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Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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.

16. Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

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

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. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. 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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