

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.09.2022

Version number 4

Revision: 07.09.2022

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

· **1.1 Product identifier**

- **Trade name:** *Dodecylsulfate-Na-salt*
- **Synonyma SDS:** *Sodium laurylsulfate*



- **Article number:** 20763, 20771

- **CAS Number:**  
151-21-3

- **EC number:**  
205-788-1

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*

- **Application of the substance / the mixture:** *Laboratory chemicals*

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

*SERVA Electrophoresis GmbH*

*Carl-Benz-Str. 7*

*D-69115 Heidelberg*

*Tel.: +49 6221 13840-0*

*FAX: +49 6221 13840-10*

*msds.info@serva.de*

- **Information department:** *Product Safety department Tel.: +49 6221 13840-35*

· **1.4 Emergency telephone number:**

*Medical Emergency Information in case of poisoning:*

*Poison Information Center Mainz - Phone: +49 (0) 6131 19240*

*(advisory service in German or English language)*

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

- **Classification according to Regulation (EC) No 1272/2008:**



GHS05

*Eye Dam. 1 H318 Causes serious eye damage.*



GHS07

*Acute Tox. 4 H302 Harmful if swallowed.*

*Acute Tox. 4 H332 Harmful if inhaled.*

*Skin Irrit. 2 H315 Causes skin irritation.*

*STOT SE 3 H335 May cause respiratory irritation.*

*Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.*

· **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008:**

*The substance is classified and labelled according to the CLP regulation.*

- **Hazard pictograms:** *GHS05, GHS07*

- **Signal word:** *Danger*

- **Hazard statements:**

*H302+H332 Harmful if swallowed or if inhaled.*

*H315 Causes skin irritation.*

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- H318 Causes serious eye damage.  
 H335 May cause respiratory irritation.  
 H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
    - P273 Avoid release to the environment.
    - P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
    - P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
    - P302+P352 IF ON SKIN: Wash with plenty of soap and water.
    - P304+P340 IF INHALED: Remove person to fresh air and keep 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.
  - **Labelling of packages where the contents do not exceed 125 ml**
  - **Hazard pictograms** GHS05, GHS07
  - **Signal word** Danger
  - **Hazard statements**
    - H318 Causes serious eye damage.
  - **Precautionary statements**
    - P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
    - P302+P352 IF ON SKIN: Wash with plenty of soap and water.
    - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - **2.3 Other hazards**
  - **Results of PBT and vPvB assessment:**
    - **PBT:** PBT - assessment not available.
    - **vPvB:** vPvB - assessment not available.

**SECTION 3: Composition/information on ingredients**

- **3.1 Substances**
- **CAS No. Description:**  
151-21-3 sodium dodecyl sulphate
- **Identification number(s):**
- **EC number:** 205-788-1
- **Description:**
- **Empirical formula:**  $C_{12}H_{25}O_4SNa$
- **MW:** 288.4

· **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

anionic surfactants

≥30%

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist immediately.
- **After swallowing:**  
Wash out mouth instantly. Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Coughing

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*Breathing difficulty*

- **4.3 Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
*CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*
- **5.2 Special hazards arising from the substance or mixture:**  
*In case of fire, the following can be formed, but not limited to:*  
*Carbon monoxide and carbon dioxide*  
*Sulphur oxides (SOx)*
- **5.3 Advice for firefighters**
- **Protective equipment:** *Wear self-contained respiratory protective device.*
- **Additional information**  
*Collect contaminated fire fighting water separately. It must not enter the sewage system.*

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
*Wear protective clothing.*  
*Ensure adequate ventilation*  
*Avoid formation of dust.*  
*Avoid contact with the eyes and skin.*
- **6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **6.3 Methods and material for containment and cleaning up**  
*Dispose contaminated material as waste according to item 13.*  
*Pick up mechanically.*
- **6.4 Reference to other sections**  
*See Section 7 for information on safe handling*  
*See Section 8 for information on personal protection equipment.*  
*See Section 13 for disposal information.*

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling:** *No special precautions are necessary if used correctly.*
- **Information about protection against explosions and fires:** *Protect against electrostatic charges.*
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** *Store only in unopened original receptacles.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:**  
*Store under lock and key and with access restricted to technical experts or their assistants only.*  
*Keep receptacle tightly sealed and store in dry conditions.*
- **7.3 Specific end use(s):** *No further relevant information available.*

**SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:** *Not required.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **8.2 Exposure controls**
- **Appropriate engineering controls:** *No further data; see item 7.*

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- **Individual protection measures, such as personal protective equipment:**
- **General protective and hygienic measures:**
  - Keep away from foodstuffs, beverages and feed.
  - Store protective clothing separately.
  - Immediately remove all soiled and contaminated clothing
  - Avoid contact with the eyes and skin.
  - Wash hands before breaks and at the end of work.
- **Breathing equipment:**
  - Short term filter device:
  - Filter P2.
- **Hand protection:**
  - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves:**
  - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:**
  - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
  - Nitrile rubber, NBR
  - Chloroprene rubber, CR
- **Eye/face protection:** Tightly sealed goggles.
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information:**
- **Physical state:** Solid.
- **Colour:** White
- **Odour:** Odourless
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** 204-207 °C
- **Boiling point or initial boiling point and boiling range:** no information available
- **Flammability:** Based on available data, the classification criteria of flammable solids are not met.  
burning time (sample length 200 mm, UN test N. 1 - preliminary test): > 120 seconds
- **Lower and upper explosion limit:**
- **Lower:** no information available
- **Upper:** no information available
- **Flash point:** >150 °C
- **Decomposition temperature:** no information available
- **pH:** 6-9
- **Viscosity:**
- **Kinematic viscosity:** no information available
- **Dynamic viscosity:** no information available
- **Solubility:**
- **Water:** Soluble
- **Partition coefficient n-octanol/water (log value):** log Pow (22°C): 0,83

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· <b>Vapour pressure at 20 °C:</b>	0.0018 hPa
· <b>Density and/or relative density:</b>	
· <b>Density:</b>	Not determined
· <b>Relative density:</b>	no information available
· <b>Particle characteristics</b>	No information available
· <b>9.2 Other information</b>	There are no more data available.
· <b>Appearance:</b>	
· <b>Form:</b>	crystalline flakes or powder
· <b>Important information on protection of health and environment, and on safety:</b>	
· <b>Ignition temperature:</b>	no information available
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive dust-/air mixtures are possible.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant informations available
- **10.2 Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:**  
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion
- **10.4 Conditions to avoid:**  
Avoid high temperatures, flames, sparks  
moisture
- **10.5 Incompatible materials:** Avoid contact with strong oxidizers.
- **10.6 Hazardous decomposition products:** In case of fire: See Section 5

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:**
- **Acute toxicity:** Harmful if swallowed or if inhaled.

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	1,288 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50	>3.9 /mg/l - 1h (rat)

- **Skin corrosion/irritation:** Causes skin irritation.
- **Serious eye damage/irritation:** Causes serious eye damage.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause respiratory irritation.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards:**
- **Endocrine disrupting properties:** Substance is not listed.

### SECTION 12: Ecological information

- **12.1 Toxicity:**
- **Aquatic toxicity:**  
LC50/48h (*Daphnia dubia*): 5,55 mg/l

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NOEC (*Daphnia dubia*, 7 d): 0,684 mg/lToxicity to fish: LC50/96h (*pimephales promelas*) 29 mg/l**· 12.2 Persistence and degradability:**

Biodegradability: 95 % in 28 d

the product is readily biodegradable.

90% (28 d)

**· 12.3 Bioaccumulative potential:**Bioconcentrationfactor: 3,9-5,3 (72h), *Cyprinus carpio*

Distribution coefficient n-octanol/water logP o/w: 1,6

**· 12.4 Mobility in soil:** No further relevant information available.**· 12.5 Results of PBT and vPvB assessment:****· PBT:** PBT - assessment not available.**· vPvB:** vPvB - assessment not available.**· 12.6 Endocrine disrupting properties:** For information on endocrine disrupting properties see section 11.**· 12.7 Other adverse effects:****· Additional ecological information:****· General notes:**

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.

**SECTION 13: Disposal considerations****· 13.1 Waste treatment methods****· Recommendation**

Disposal must be made according to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

**· Uncleaned packagings:****· Recommendation:**

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

**· Recommended cleansing agent:** Water, if necessary with cleansing agents.**SECTION 14: Transport information****· 14.1 UN number or ID number****· ADR, IMDG, IATA**

Void

**· 14.2 UN proper shipping name****· ADR, IMDG, IATA**

Void

**· 14.3 Transport hazard class(es)****· ADR, ADN, IMDG, IATA****· Class:**

Void

**· 14.4 Packing group****· ADR, IMDG, IATA**

Void

**· 14.5 Environmental hazards****· Marine pollutant:**

No

**· 14.6 Special precautions for user**

Not applicable.

**· 14.7 Maritime transport in bulk according to IMO****instruments**

Not applicable.

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· UN "Model Regulation": Void

\* **SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**  
Substance is not listed.
- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**  
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**  
Substance is not listed.
- **National regulations:**
- **Water hazard class:** Water hazard class 2 (Assessment by list): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

\* **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Date of previous version:** 02.05.2018
- **Version number of previous version:** 3
- **Abbreviations and acronyms:**  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
ICAO: International Civil Aviation Organisation  
PBT: persistent, bioaccumulative, toxic substance (REACH)  
vPvB: very persistent, very bioaccumulative substance (REACH)  
REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
CLP: Regulation on classification, labelling and packaging of substances and mixtures  
bw: body weight  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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