

# Safety Data Sheet

acc. to OSHA HCS

Printing date 09/08/2022

Reviewed on 09/08/2022

## 1 Identification

- **Product identifier**
- **Trade name:** Dodecylsulfate-Na-salt in pellets
- **Article number:** 20765
- **CAS Number:**  
151-21-3
- **EC number:**  
205-788-1
- **Application of the substance / the mixture:** Laboratory chemicals
- **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
- **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)

**SERVA**  
■ serving scientists ■

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



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.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:** GHS05, GHS07

- **Signal word:** Danger

- **Hazard statements:**

Harmful if swallowed or if inhaled.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation.

- **Precautionary statements**

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

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*If on skin: Wash with plenty of soap and water.*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*3

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment:**

· **PBT:** PBT - assessment not available.

· **vPvB:** vPvB - assessment not available.

### 3 Composition/information on ingredients

· **Chemical characterization: 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:** 288.38

### 4 First-aid measures

· **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.

· **Most important symptoms and effects, both acute and delayed**

Coughing

Breathing difficulty

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Sulphur oxides (SO<sub>x</sub>)  
Flammable substance, vapours are heavier than air and spread over the floor.
- **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.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Avoid formation of dust.  
Avoid contact with the eyes and skin.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up**  
Dispose contaminated material as waste according to item 13.  
Pick up mechanically.
- **Protective Action Criteria for Chemicals**
- **PAC-1:** 3.9 mg/m<sup>3</sup>
- **PAC-2:** 43 mg/m<sup>3</sup>
- **PAC-3:** 260 mg/m<sup>3</sup>
- **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.

## 7 Handling and storage

- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Protect against electrostatic charges.
- **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.
- **Specific end use(s):** No further relevant information available.

## 8 Exposure controls/personal protection

- **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.
- **Exposure controls**
- **Additional information about design of technical systems:** No further data; see item 7.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Store protective clothing separately.

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*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*

**· Protection of hands:**

*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 protection:** *Tightly sealed goggles*

**· Body protection:** *Protective work clothing*

## 9 Physical and chemical properties

**· Information on basic physical and chemical properties**

**· General Information:**

**· Color:**

*white to almost white*

**· Odor:**

*Odorless*

**· Odor threshold:**

*Not determined.*

**· Melting point/Melting range:**

*204-207 °C (399.2-404.6 °F)*

**· Boiling point/Boiling range:**

*no information available*

**· Flammability (solid, gaseous):**

*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*

**· Explosion limits:**

**· Lower:**

*no information available*

**· Upper:**

*no information available*

**· Flash point:**

*>150 °C (>302 °F)*

**· Decomposition temperature:**

*no information available*

**· pH-value:**

*6-9*

**· Viscosity:**

**· Kinematic viscosity:**

*no information available*

**· Dynamic viscosity:**

*no information available*

**· Solubility in / Miscibility with:**

**· Water:**

*Soluble.*

**· Partition coefficient (n-octanol/water):**

*log Pow (22°C): 0,83*

**· Vapor pressure at 20 °C (68 °F):**

*0.0018 hPa (0 mm Hg)*

**· Density:**

*Not determined.*

**· Relative density:**

*no information available*

**· Other information**

*There are no more data available.*

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- **Appearance:**
- **Form:** Pellets
- **Important information on protection of health and environment, and on safety:**
- **Ignition temperature:** no information available
- **Danger of explosion:** Product is not explosive. However, formation of explosive dust-/air mixtures are possible.

## 10 Stability and reactivity

- **Reactivity:** No further relevant informations available
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **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.
- **Conditions to avoid:**  
Avoid high temperatures, flames, sparks  
moisture
- **Incompatible materials:** Avoid contact with strong oxidizers.
- **Hazardous decomposition products:** In case of fire: See Section 5

## 11 Toxicological information

- **Information on toxicological effects**
  - **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) |
- **on the skin:** Causes skin irritation.
  - **on the eye:** Causes serious eye damage.
  - **Specific target organ toxicity - single exposure:** May cause respiratory irritation.
  - **Additional toxicological information:**
  - **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)** Substance is not listed.
  - **NTP (National Toxicology Program)** Substance is not listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

## 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:**  
LC50/48h (*Daphnia dubia*): 5,55 mg/l  
NOEC (*Daphnia dubia*, 7 d): 0,684 mg/l  
Toxicity to fish: LC50/96h (*pimephales promelas*) 29 mg/l
- **Persistence and degradability:**  
Biodegradability: 95 % in 28 d  
the product is readily biodegradable.  
90% (28 d)
- **Bioaccumulative potential:**  
Bioconcentrationfactor: 3,9-5,3 (72h), *Cyprinus carpio*  
Distribution coefficient n-octanol/water logP o/w: 1,6

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- **Mobility in soil:** No further relevant information available.
  - **Results of PBT and vPvB assessment:**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
  - **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 (Assessment by list): hazardous for water

### 13 Disposal considerations

- **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.

### 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>UN proper shipping name</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Transport hazard class(es)</b>  | Void            |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Void            |
| · <b>Class</b>   | Void            |
| · <b>Packing group</b>   | Void            |
| · <b>DOT, ADR, IMDG, IATA</b>  | Void            |
| · <b>Environmental hazards</b>   | No              |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **Hazardous Air Pollutants** Substance is not listed.
- **Proposition 65** Substance is not listed.
- **Chemicals known to cause cancer:** Substance is not listed.

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- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenicity categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.
- **TLV (Threshold Limit Value)** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements**  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS05, GHS07
- **Signal word** Danger
- **Hazard statements**  
Harmful if swallowed or if inhaled.  
Causes skin irritation.  
Causes serious eye damage.  
May cause respiratory irritation.
- **Precautionary statements**  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: Call a poison center/doctor if you feel unwell.  
If on skin: Wash with plenty of soap and water.  
**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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 preparation / last revision** 09/08/2022 / 4
- **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  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2

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*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

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