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

1.1 Product identifier
- Trade name: Dodecylsulfate-Na-salt in pellets
- Synonyma SDS; Sodium laurylsulfate
- Article number: 20765
- 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

GHS02
Flam. Sol. 2 H228 Flammable solid.

GHS05
Eye Dam. 1 H318 Causes serious eye damage.

GHS07
Acute Tox. 4 H302 Harmful if swallowed.
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 GHS02, GHS05, GHS07

(Contd. on page 2)
Trade name: Dodecylsulfate-Na-salt in pellets

- Signal word Danger
- Hazard statements
  H228 Flammable solid.
  H302 Harmful if swallowed.
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H335 May cause respiratory irritation.
  H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P273 Avoid release to the environment.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  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 GHS02, GHS05, GHS07
- Signal word Danger
- Hazard statements
  H318 Causes serious eye damage.
- Precautionary statements
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  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 Chemical characterisation: Substances
- CAS No. Description:
  151-21-3 sodium dodecyl sulphate
- Identification number(s):
- EC number: 205-788-1
- Description:
- Empirical formula: \(C_{12}H_{25}O_4S\ Na\)
- 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 in case of complaints.
  - 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.
4.2 Most important symptoms and effects, both acute and delayed

- Coughing
- 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
  
  CO₂, 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 respirator 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:

- Pick up mechanically.
- Dispose contaminated material as waste according to item 13.

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

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of dust.
- Avoid contact with eyes and skin.

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:
    
    Store away from flammable liquids.
    
    Store away from oxidising agents.
Trade name: Dodecylsulfate-Na-salt in pellets

- Further information about storage conditions:
  - Store under lock and key and with access restricted to technical experts or their assistants only.
  - Protect from heat and direct sunlight.
  - 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*

- Additional information about design of technical systems: No further data; see item 7.
- 8.1 Control parameters
- 8.2 Exposure controls
  - 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.
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
  - Breathing equipment:
    - Short term filter device: Filter P2.
  - Protection of hands:
    - Protective gloves.
    - 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 trough 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.

*SECTION 9: Physical and chemical properties*

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:
  - Form: Pellets
  - Colour: white to almost white
  - Odour: Odourless
  - Odour threshold: Not determined.
- pH-value: 6.9
Trade name: Dodecylsulfate-Na-salt in pellets

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>204-207 °C</td>
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<tr>
<td>Initial boiling point and boiling range</td>
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</tr>
<tr>
<td>Flash point</td>
<td>&gt;150 °C</td>
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<tr>
<td>Flammability (solid, gaseous)</td>
<td>flammable solid</td>
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<tr>
<td>Ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
<td>no information available</td>
</tr>
<tr>
<td>Self igniting</td>
<td>no information available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product does not present an explosion hazard.</td>
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<tr>
<td>Explosion limits</td>
<td></td>
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<td>Lower</td>
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<tr>
<td>Upper</td>
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<tr>
<td>Vapour pressure</td>
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<tr>
<td>Density at 20 °C</td>
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<tr>
<td>Bulk density</td>
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<tr>
<td>Relative density</td>
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<tr>
<td>Vapour density</td>
<td>no information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
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<tr>
<td>Solubility in / Miscibility with Water at 20 °C</td>
<td>150 g/l</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>1.6 log POW</td>
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<tr>
<td>Viscosity:</td>
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<tr>
<td>Dynamic</td>
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<tr>
<td>Kinematic</td>
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<tr>
<td>9.2 Other information</td>
<td>There are no more data available.</td>
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</table>

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
- 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 toxicological effects
- Acute toxicity
  Harmful if swallowed.
- LD/LC50 values that are relevant for classification:
  151-21-3 sodium dodecyl sulphate
  Oral LD50 1288 mg/kg (rat)
### SECTION 12: Ecological information

#### 12.1 Toxicity

Aquatic toxicity:

| 151-21-3 sodium dodecyl sulphate | EC50/48h 6 mg/l (Daphnia magna) |

**12.2 Persistence and degradability**

Easily biodegradable

90% (28 d)

**12.3 Bioaccumulative potential**

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

Distribution coefficient n-octanol/water logP o/w: 1.6

**12.4 Mobility in soil**

No further relevant information available.

**Additional ecological information:**

**General notes:**

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

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

**12.5 Results of PBT and vPvB assessment**

**PBT:**

PBT - assessment not available.

**vPvB:**

vPvB - assessment not available.

**12.6 Other adverse effects**

No further relevant information available.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

**Recommendation**

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

Disposal must be made according to official regulations.

**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**
  - ADR, IMDG, IATA: UN1325

- **14.2 UN proper shipping name**
  - **ADR**: FLAMMABLE SOLID, ORGANIC, N.O.S. (sodium dodecyl sulphate)
  - **IMDG**: FLAMMABLE SOLID, ORGANIC, N.O.S. (sodium dodecyl sulphate)
  - **IATA**: Flammable solid, organic, n.o.s. (Sodium dodecyl sulphate)

- **14.3 Transport hazard class(es)**
  - ADR, IMDG, IATA
  - **Class**: 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
  - **Label**: 4.1

- **14.4 Packing group**
  - ADR, IMDG, IATA: III

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for user**
  - Warning: Flammable solids, self-reactive substances and solid desensitised explosives.
  - **Danger code (Kemler)**: 40
  - **EMS Number**: F-A,S-G
  - **Stowage Category**: B

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.

- **Transport/Additional information:**
  - **ADR**
    - Limited quantities (LQ): 5 kg
    - Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g
  - **Transport category**: 3
  - **Tunnel restriction code**: E
  - **IMDG**
    - Limited quantities (LQ): 5 kg
    - Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g
  - **UN “Model Regulation”:**
    - UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE), 4.1, III

(Contd. on page 8)
**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 40
- **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
- **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
  - **ADR:** Accord européen sur le transport 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
  - **Flam. Sol. 2:** Flammable solids – Category 2
  - **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

* Data compared to the previous version altered.