1 Identification

- **Product identifier**
  - **Trade name:** Dodecylsulfate-Na-salt
  - **Article number:** 20763, 20771
  - **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)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - **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.

- **Label elements**
  - **GHS label elements**
    The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms** GHS02, GHS05, GHS07
  - **Signal word** Danger
  - **Hazard statements**
    Flammable solid.
    Harmful if swallowed.
    Causes skin irritation.
    Causes serious eye damage.
May cause respiratory irritation.

**Precautionary statements**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- 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.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

**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: C₁₂ H₂₅ O₄ S Na
  - MW: 288.4

### 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 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.
- After swallowing:
  - Wash out mouth. Drink no more than 2 glasses of water afterwards and supply fresh air. Seek medical advice if discomfort occurs.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    - Coughing
    - Breathing difficulty
5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:
CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Sulphur oxides (SOx)
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:
Pick up mechanically.
Dispose contaminated material as waste according to item 13.

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

Handling:

Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Avoid contact with eyes and skin.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
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:
Store away from flammable liquids.
Store away from oxidizing agents.

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.
Trade name: Dodecylsulfate-Na-salt

* Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- 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
- 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

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    Form: Powder
    Color: White
    Odor: Odorless
    Odor threshold: Not determined.
  - pH-value: 6-9
- Change in condition
  - Melting point/Melting range: 204-207 °C (399.2-404.6 °F)
  - Boiling point/Boiling range: no information available

(Contd on page 5)
Trade name: Dodecylsulfate-Na-salt

(Contd. of page 4)

- **Flash point:** >150 °C (>302 °F)
- **Flammability (solid, gaseous):** flammable solid
- **Ignition temperature:** no information available
- **Decomposition temperature:** no information available
- **Auto igniting:** no information available
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** no information available
  - **Upper:** no information available
- **Vapor pressure:** no information available
- **Density at 20 °C (68 °F):** 1.1 g/cm³ (9.1795 lbs/gal)
- **Bulk density at 20 °C (68 °F):** 388 kg/m³
- **Relative density** no information available
- **Vapor density** no information available
- **Evaporation rate** no information available
- **Solubility in / Miscibility with Water at 20 °C (68 °F):** 150 g/l
- **Partition coefficient (n-octanol/water):** 1.6 log POW
- **Viscosity:**
  - **Dynamic:** no information available
  - **Kinematic:** no information available
- **Other information** There are no more data available.

* 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
- **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:**
  - **LD/LC50 values that are relevant for classification:**
    - **Oral LD50:** 1288 mg/kg (rat)
    - **Dermal LD50:** >2000 mg/kg (rabbit)
    - **LC50/96h:** 3.6 mg/l (Forelle)

- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
Trade name: Dodecylsulfate-Na-salt

- 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 Toxicology Safety & Health Administration) Substance is not listed.

* 12 Ecological information

  - Toxicity
    - Aquatic toxicity:
      EC50/48h 6 mg/l (Daphnia magna)

  - Persistence and degradability
    - Easily biodegradable
      90% (28 d)

  - Behavior in environmental systems:
    - 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

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

  - Additional ecological information:
    - General notes:
      Water hazard class 2 (Assessment by list): hazardous for water
      Do not allow product to reach ground water, water course or sewage system.
    - Results of PBT and vPvB assessment
      - PBT: Not applicable.
      - vPvB: Not applicable.
    - Other adverse effects
      No further relevant information available.

* 13 Disposal considerations

  - 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.

* 14 Transport information

  - UN-Number
    - DOT, ADR, IMDG, IATA
      UN1325

  - UN proper shipping name
    - ADR
      2926 FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (sodium dodecyl sulphate)
    - IMDG, IATA
      FLAMMABLE SOLID, ORGANIC, N.O.S. (sodium dodecyl sulphate)
### 47.1.12 Transport hazard class(es)

#### DOT

- **Class**: 4.1 Flammable solids, self-reactive substances and solid desensitised explosives
- **Label**: 4.1

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#### ADR, IMDG, IATA

- **Class**: 4.1 Flammable solids, self-reactive substances and solid desensitised explosives
- **Label**: 4.1

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#### Packing group

<table>
<thead>
<tr>
<th>DOT, ADR, IMDG, IATA</th>
<th>III</th>
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#### Environmental hazards:

- **Marine pollutant**: No

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#### 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

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#### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- **Not applicable.**

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#### Transport/Additional information:

- **ADR**
  - **Excepted quantities (EQ)**: Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g

- **IMDG**
  - **Limited quantities (LQ)**: 5 kg
  - **Excepted quantities (EQ)**: Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g

- **UN "Model Regulation":** UN2926, FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S., 4.1 (6.1), III

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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Section 355 (extremely hazardous substances)**: Substance is not listed.
  - **Section 313 (Specific toxic chemical listings)**: Substance is not listed.
  - **TSCA (Toxic Substances Control Act)**: Substance is listed.
  - **Proposition 65 Substance is not listed.**

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**Chemicals known to cause cancer**: Substance is not listed.
Trade name: Dodecylsulfate-Na-salt

- 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.

- Cancerogenity categories
  - EPA (Environmental Protection Agency) Substance is not listed.
  - TLV (Threshold Limit Value established by ACGIH) 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 GHS02, GHS03, GHS07
  - Signal word Danger

- Hazard statements
  Flammable solid.
  Harmful if swallowed.
  Causes skin irritation.
  Causes serious eye damage.
  May cause respiratory irritation.

- Precautionary statements
  Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  Avoid release to the environment.
  Wear protective gloves/protective clothing/eye protection/face protection.
  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.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

- 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 11/20/2018 / 2
- 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 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
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - 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         |
| 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 |

* Data compared to the previous version altered.