Material Safety Data Sheet

Printing date 10/13/2003 Reviewed on 10/13/2003

1 Identification of substance:

○ Product details:

○ Trade name: SDS (sodium dodecylsulfate)

○ Catalog or product number: 1610300, 1610301, 1610302, 1610316, 1610327

○ Application of the substance / the preparation Laboratory chemicals

○ Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California  94547                      (510)741-1000

○ Information department: Technical services, customer support.

○ Emergency information:

1(800)424-9300  Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.
510-741-1000
2 Composition/Information on components:

- Chemical characterization:
  - CAS No. Description:
    - 151-21-3 sodium dodecyl sulphate
  - Identification number(s):
  - EINECS Number: 205-788-1

3 Hazards identification

- Emergency overview: Xn Harmful

- Information pertaining to particular dangers for man and environment
  - R 21/22 Harmful in contact with skin and if swallowed.
  - R 36/38 Irritating to eyes and skin.

- NFPA ratings (scale 0-4)
  - Health = 1
  - Fire = 0
  - Reactivity = 0

4 First aid measures

- General information
  - Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation
  - In case of unconsciousness place patient stably in side position for transportation.

- After skin contact
  - Immediately wash with water and soap and rinse thoroughly.

- After eye contact
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Immediately call a doctor.

5 Fire fighting measures

- Suitable extinguishing agents
  
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions: Not required
  
- Measures for environmental protection:
  
  Do not allow to enter sewers/surface or ground water.
  
- Measures for cleaning/collecting:
  
  Dispose contaminated material as waste according to item 13.

7 Handling and storage

- Handling
  
  Information for safe handling:
  
  No special precautions are necessary if used correctly.
  
  Information about protection against explosions and fires:
  
  No special measures required.

- Storage
  
  Requirements to be met by storerooms and receptacles:
  
  No special requirements.
  
  Information about storage in one common storage facility: Not required.

- Further information about storage conditions:
  
  Keep receptacle tightly sealed.
8 Exposure controls and personal protection

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

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.

- Personal protective equipment

- General protective and hygienic measures
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing.
  Wash hands before breaks and at the end of work.
  Avoid contact with the eyes and skin.

- Protection of hands:
  Protective gloves.
  Synthetic gloves

- Material of gloves
  Synthetic gloves

- 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.

- Eye protection:
  Tightly sealed goggles.
9 Physical and chemical properties:

- General Information

- **Form:** Solid.
- **Color:** White
- **Odor:** Odorless

<table>
<thead>
<tr>
<th><strong>Value/Range</strong></th>
<th><strong>Unit</strong></th>
<th><strong>Method</strong></th>
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</thead>
<tbody>
<tr>
<td>Change in condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>undetermined</td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>undetermined</td>
<td></td>
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<tr>
<td>Flash point:</td>
<td>Not applicable</td>
<td></td>
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<tr>
<td>Flammability (solid, gaseous):</td>
<td>Product is not flammable</td>
<td></td>
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<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard</td>
<td></td>
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</tbody>
</table>

- **Density:** at 20 °C 0.67 g/cm³

- **Solubility in / Miscibility with**

  - **Water:** at 20 °C 100 g/l
  - **Organic solvents:** 0.0 %
  - **Solids content:** 100.0 %
10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known
- Dangerous products of decomposition:
  No dangerous decomposition products known

11 Toxicological information

- Acute toxicity:
  LD/LC50 values for hazardous components per OSHA criteria:
  151-21-3 sodium dodecyl sulphate
  Oral: LD50: 1288 mg/kg (rat)
- Primary irritant effect:
  - on the skin: Irritant to skin and mucous membranes.
  - on the eye: Irritant effect.
  - Sensitization: No sensitizing effects known.

12 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.
  Danger to drinking water if even small quantities leak into the ground.
13 Disposal considerations

- **Product:**
  - **Recommendation**
    
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

- **Uncleaned packagings:**
  - **Recommendation:**
    
    Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**

- **Hazard class:** -

- **Land transport ADR/RID (cross-border)**

- **ADR/RID class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** -
15 Regulations

○ SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

  **Section 302/304 (40CFR355.30 / 40CFR355.40):**

  Substance not listed.

  **Section 313 (40CFR372.65):**

  Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

○ California Proposition 65:

  **Chemicals known to cause cancer:**

  Substance is not listed.

  **Chemicals known to cause reproductive toxicity:**

  Substance is not listed.

○ Cancerogenity categories

EPA (Environmental Protection Agency)

Substance is not listed.

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

MAK (German Maximum Workplace Concentration)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)
Substance is not listed.

- **Markings according to EU guidelines:**

  The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:** Xn Harmful

- **Risk phrases:**

  21/22 Harmful in contact with skin and if swallowed.
  36/38 Irritating to eyes and skin.

- **Safety phrases:**

  36 Wear suitable protective clothing.
  60 This material and its container must be disposed of as hazardous waste.

- **National regulations**

- **Water hazard class:**

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

- **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 MSDS:** Environmental Health and Safety.

- **Contact:**

  Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

  Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000