1 Identifikasi Senyawa (Tunggal atau Campuran)

- Product identifier
- Trade name: Dextran Sulfate Sodium Salt
- Article number: 160110
- CAS Number: 9011-18-1
- Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
- Application of the substance / the mixture Research use only.
- Details of the supplier of the safety data sheet
- Further information obtainable from: Quality Control Department
- Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Identifikasi Bahaya

- Classification of the substance or mixture
  The substance is not classified according to the Globally Harmonised System (GHS).

- Label elements
  - GHS label elements Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Komposisi /Informasi tentang Bahan Penyusun Senyawa Tunggal

- Chemical characterisation: Substances
- CAS No. Description
  9011-18-1 Dextran Sodium Sulfate, MW = 36,000-50,000

4 Tindakan Pertolongan Pertama pada Kecelakaan

- Description of first aid measures
  - General information: No special measures required.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed No further relevant information available.
    - Indication of any immediate medical attention and special treatment needed
      No further relevant information available.

(Contd. on page 2)
5 Tindakan pemadaman kebakaran

- **Extinguishing media**
- **Suitable extinguishing agents**: Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture**: No further relevant information available.
- **Advice for firefighters**
- **Protective equipment**: No special measures required.

6 Tindakan Penanggulangan jika terjadi Tumpahan dan Kebocoran

- **Personal precautions, protective equipment and emergency procedures**: Not required.
- **Environmental precautions**: Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up**: Pick up mechanically.
- **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 Penanganan dan Penyimpanan

- **Handling**
  - **Precautions for safe handling**: No special measures required.
  - **Information about fire - and explosion protection**: No special measures required.
  - **Conditions for safe storage, including any incompatibilities**
  - **Storage**: 15-30°C
  - **Requirements to be met by storerooms and receptacles**: No special requirements.
  - **Further information about storage conditions**
  - **Specific end use(s)**: No further relevant information available.

8 Kontrol Paparan/Perlindungan Diri

- **Additional information about design of technical facilities**: No further data; see item 7.
- **Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace**: Not required.
  - **Additional information**: The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment**:
  - **General protective and hygienic measures**: The usual precautionary measures are to be adhered to when handling chemicals.
  - **Respiratory protection**: Not required.
  - **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.
### Trade name: Dextran Sulfate Sodium Salt

- **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**: Not required.

### 9 Sifat fisika dan kimia

- **Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance**:
    - **Form**: Powder
    - **Colour**: Off-White
    - **Odour**: Indeterminate
    - **Odour threshold**: Not determined.
  - **pH-value**: Not applicable.
  - **Change in condition**
    - **Melting point/freezing point**: Undetermined.
    - **Initial boiling point and boiling range**: Undetermined.
  - **Flash point**: Not applicable.
  - **Flammability (solid, gas)**: Product is not flammable.
  - **Decomposition temperature**: Not determined.
  - **Auto-ignition temperature**: Not determined.
  - **Explosive properties**: Product does not present an explosion hazard.
  - **Explosion limits**:
    - **Lower**: Not determined.
    - **Upper**: Not determined.
  - **Vapour pressure**: Not applicable.
  - **Density**: Not determined.
  - **Relative density**: Not determined.
  - **Vapour density**: Not applicable.
  - **Evaporation rate**: Not applicable.
  - **Solubility in / Miscibility with**
    - **water at 25 °C**: 100 g/l
      - Easily soluble.
  - **Partition coefficient: n-octanol/water**: Not determined.
  - **Viscosity**:
    - **Dynamic**: Not applicable.
    - **Kinematic**: Not applicable.
  - **Solvent content**:
    - **VOC (EC)**: 0.00 %
  - **Other information**
    - No further relevant information available.
10 Stabilitas dan Reaktifitas

- Reactivity: No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Informasi Toksikologi

- Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral LD50</th>
<th>Parenteral LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextran Sodium Sulfate, MW = 36,000-50,000</td>
<td>25,200 mg/kg (mouse)</td>
<td>20,600 mg/kg (rat)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation: No irritant effect.
  - Serious eye damage/irritation: No irritating effect.
  - Respiratory or skin sensitisation: No sensitising effects known.
- Additional toxicological information:
  - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
  - The substance is not subject to classification according to the latest version of the EU lists.

12 Informasi Ekologi

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behaviour in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it 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 Pembuangan Limbah

- Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
Trade name: Dextran Sulfate Sodium Salt

Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Informasi Transpor/Pengangkutan

- UN-Number
  - ADR, IMDG, IATA Not regulated
- UN proper shipping name
  - ADR, IMDG, IATA Not regulated
- Transport hazard class(es)
  - ADR, IMDG, IATA Not regulated
  - Class Not regulated
- Packing group
  - ADR, IMDG, IATA Not regulated
- Environmental hazards: Not applicable.
- Special precautions for user Not applicable.
- Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
- UN "Model Regulation": Not regulated

15 Informasi yang Berkaitan dengan Regulasi

- Safety, health and environmental regulations/legislation specific for the substance or mixture Void
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Informasi Lain

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: Quality Control Dept.
- Abbreviations and acronyms:
  - 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
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent

(Contd. on page 6)
**Trade name: Dextran Sulfate Sodium Salt**

- **PBT:** Persistent, Bioaccumulative and Toxic
- **vPvB:** very Persistent and very Bioaccumulative

(Contd. of page 5)