SAFETY DATA SHEET

DEAE-Dextran

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

1.1. Product identifier
   Trade name
   DEAE-Dextran
   Product no.

1.2. Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses of the substance or mixture
   Active pharmaceutical ingredient for pharmaceutical preparations and other industrial uses.
   Relevant identified uses of the substance or mixture (REACH)
   Not applicable
   Uses advised against
   Not applicable

1.3. Details of the supplier of the safety data sheet
   Company and address
   Pharmacosmos A/S
   Roervangsvej 30
   4300 Holbaek
   Denmark
   T: +45 5948 5959
   F: +45 5948 5960
   Contact person
   Lise Larsen
   E-mail
   info@pharmacosmos.com
   SDS date
   2019-06-18
   SDS Version
   2.0

1.4. Emergency telephone number
   Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
   Not classified according to Regulation (EC) No. 1272/2008 (CLP)

2.2. Label elements
   Hazard pictogram(s)
   Not applicable
   Signal word
   Not applicable
   Hazard statement(s)
   Not applicable
   Safety statement(s)
   General
   -
   Prevention
   -
   Response
   -
   Storage
According to EC-Regulation 2015/830

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### Disposal

Hazardous substances
Not applicable

#### 2.3. Other hazards

Additional labelling
Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

<table>
<thead>
<tr>
<th>Product/Ingredient name</th>
<th>Identifier number</th>
<th>% w/w</th>
<th>CLP</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEAE-Dextran</td>
<td>CAS No.: 9064-91-9</td>
<td>95-100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC No.:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH No.:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index No.:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 3.2 Mixtures

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

**Other information**

No special

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact the National Poisons Information Service: Dial 0344 892 0111 (24 h service).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

**Inhalation**

Bring the person into fresh air and stay with him/her.

**Skin contact**

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

**Eye contact**

Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30°C) for at least 15 minutes. Seek medical assistance and continue flushing during transport.

**Ingestion**

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

**Burns**

Not applicable

#### 4.2. Most important symptoms and effects, both acute and delayed

No special

#### 4.3. Indication of any immediate medical attention and special treatment needed

No special

**Information to medics**

Bring this safety data sheet.

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### SECTION 5: Firefighting measures

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5.1. Extinguishing media
   Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture
   Fire will result in dense black smoke. Exposure to combustion products may harm your health. Firefighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

   If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are:

5.3. Advice for firefighters
   No specific requirements

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
   No specific requirements

6.2. Environmental precautions
   No specific requirements

6.3. Methods and material for containment and cleaning up
   To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

   Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.

6.4. Reference to other sections
   See section on “Disposal considerations” in regard of handling of waste.
   See section on ‘Exposure controls/personal protection’ for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
   Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms.

   See section on “Exposure controls/personal protection” for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities
   Always store in containers of the same material as the original container.

   Storage temperature
   Should be stored according to conditions described on the label.

7.3. Specific end use(s)
   This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
   No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit.

   DNEL / PNEC

8.2. Exposure controls
   Control is unnecessary if the product is used as intended.

   General recommendations
   Smoking, eating and drinking are not allowed in the work premises

   Exposure scenarios
   In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

   Exposure limits
   Occupational exposure limits have not been defined for the substances in this product.

   Appropriate technical measures
   Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

   Hygiene measures
   In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.
Measures to avoid environmental exposure
No specific requirements

Individual protection measures, such as personal protective equipment

Generally
Use only CE marked protective equipment.

Respiratory Equipment

<table>
<thead>
<tr>
<th>Work situation</th>
<th>Recommended Filter type</th>
<th>Class</th>
<th>Colour</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>If ventilation at the workplace is insufficient, use a half- or full mask with a appropriate particle filter.</td>
<td>S/SL</td>
<td>-</td>
<td>White</td>
<td>EN149</td>
</tr>
</tbody>
</table>

Skin protection
No specific requirements

Hand protection
No specific requirements

Eye protection

<table>
<thead>
<tr>
<th>Recommended</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear face shield alternatively safety glasses with side shields.</td>
<td>EN166</td>
</tr>
</tbody>
</table>

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form
Powder

Colour
White

Odour
None

Odour threshold (ppm)
No data available

pH
No data available

Density (g/cm³)
No data available

Viscosity (40°C)
No data available

Phase changes
Melting point (°C)
No data available

Boiling point (°C)
No data available

Vapour pressure
No data available

Vapour density
No data available

Decomposition temperature (°C)
No data available

Evaporation rate (n-butylacetate = 100)
No data available

Data on fire and explosion hazards
Flash point (°C)
No data available

Ignition (°C)
According to EC-Regulation 2015/830

No data available

Auto flammability (°C)
No data available

Explosion limits (% v/v)
No data available

Explosive properties
No data available

Oxidizing properties
No data available

Solubility
Solubility in water
Soluble

n-octanol/water coefficient
No data available

9.2. Other information
Solubility in fat (g/L)
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available

10.2. Chemical stability
The product is stable under the conditions, noted in the section “Handling and storage”.

10.3. Possibility of hazardous reactions
No special

10.4. Conditions to avoid
No special

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available
STOT-single exposure
No data available
STOT-repeated exposure
No data available
Aspiration hazard
No data available
Long term effects
No special
SECTION 12: Ecological information

12.1. Toxicity
12.2. Persistence and degradability
12.3. Bioaccumulative potential
12.4. Mobility in soil
   No data available
12.5. Results of PBT and vPvB assessment
   This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or
   vPvB.
12.6. Other adverse effects
   No special

SECTION 13: Disposal considerations

13.1. Waste treatment methods
   Product is not covered by regulations on dangerous waste.

EWC code
   Not applicable
Specific labelling
   Not applicable
Contaminated packing
   Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 - 14.4
   Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID
   Not applicable
IMDG
   Not applicable
   Marine pollutant
   No
14.5. Environmental hazards
   Not applicable
14.6. Special precautions for user
   Not applicable
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
   Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application
   No special conditions required.

Demands for specific education
   No special

SEVESO
   CATEGORIES
   Not applicable
   NAMED DANGEROUS SUBSTANCES
   Not applicable

Additional information
   Not applicable

Sources


15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable

The safety data sheet is validated by

SHCW/CHYMEIA

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.