

## Material Safety Data Sheet

According to 91/155 EEC(2001/58 EC)

Printing date: 18.12.2006

Reviewed on: 18.12.2006

### 1 Identification of substance:

- **Product details:**
- **Trade name:** **Castor oil**
- **Application of the substance / the preparation** Chemical substance for synthesis
- **Supplier/Manufacturer:**  
Penpet Petrochemical Trading GmbH  
Merkur-Park  
Sieker Landstrasse 126  
22143 Hamburg  
Germany  
Tel: +49 40 675 799 0  
Fax: +49 40 675 799 99 / 88
- **Information department:** see above
- **Emergency information:** National Poisons Information Centre      Tel.: +44 (0)870 6006266

### 2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**  
8001-79-4 Castor oil
- **Identification number(s):**
- **EINECS Number:** 232-293-8

### 3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for man and environment:**  
According to current European laws and regulations the product is not dangerous or toxic material (based on the available data).
- **Classification system:**  
The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

### 4 First aid measures

- **General information:** If symptoms persist or in case of doubt seek medical advice.
- **After inhalation:** Inhalation of product is unlikely.
- **After skin contact:** Wash with water and soap.
- **After eye contact:**  
Rinse opened eye for several minutes under running water.  
If symptoms persist consult a doctor.
- **After swallowing:** In case of unintentional swallowing of bigger quantities or if any symptoms occur seek medical treatment.
- **Information for doctor:**
- **The following symptoms may occur:**  
After swallowing:  
Diarrhoea

### 5 Fire fighting measures

- **Suitable extinguishing agents:**  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Fire-extinguishing powder  
Sand
- **For safety reasons unsuitable extinguishing agents:** Direct jet water

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**Special hazards caused by the material, its products of combustion or resulting gases:**

- Dangerous decomposition product see chapter 10: stability and reactivity
- Protective equipment:** Wear self-contained respiratory protective device.
- Additional information:** Cool endangered receptacles with water spray.

### 6 Accidental release measures

**Person-related safety precautions:**

- Particular danger of slipping on leaked/spilled product.
- Wear protective clothing.

**Measures for environmental protection:** No special measures required.**Measures for cleaning/collecting:**

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Clean the affected area carefully; suitable cleaners are:
  - Warm water and cleansing agent
  - Send for recovery or disposal in suitable receptacles.

### 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:** Store at ambient temperature.
- Information about storage in one common storage facility:** Store away from oxidizing agents.
- Further information about storage conditions:** None.
- Storage class** 10 Combustible liquids

### 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:** The usual precautionary measures should be adhered to when handling chemicals.
- Breathing equipment:** Not required.
- Protection of hands:** Not required.
- Material of gloves:** -
- Penetration time of glove material:** -
- Eye protection:** Goggles recommended during refilling.
- Body protection:** Protective work clothing.

### 9 Physical and chemical properties:

**General Information**

- |                |                     |
|----------------|---------------------|
| <b>Form:</b>   | Fluid               |
| <b>Colour:</b> | light, yellow-green |
| <b>Odour:</b>  | Odourless           |
- Change in condition:**
    - Melting point/Melting range:** -10 bis -18°C
    - Boiling point/Boiling range:** >350°C
  - Flash point:** 255°C
  - Ignition temperature:** >450°C

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- **Danger of explosion:** Product does not present an explosion hazard.
- **Vapour pressure at 20°C:** <1 hPa
- **Density at 20°C:** 0.962 g/cm<sup>3</sup>
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix
- **Viscosity:**
  - dynamic at 20°C: 950-1100 mPas

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.  
To avoid thermal decomposition do not overheat.
- **Materials to be avoided:** Strong oxidants
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:**  
In the case of fire or at high temperatures the formation of the following decomposition products is possible.  
Carbon monoxide and carbon dioxide  
Acrolein

### 11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**  
**8001-79-4 Castor oil**  
Oral LD<sub>50</sub> >4952 mg/kg (rat)
- **Primary irritant effect:**
  - **on the skin:** No irritating effect.
  - **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
When used and handled according to specifications, the product does not have any harmful effects according 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 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:**  
**8001-79-4 Castor oil**  
EC<sub>10</sub> 54000 mg/l (pseudomonas putida)  
LC<sub>50</sub>/96h > 1000 mg/l (zb)
- **General notes:** Not hazardous for water according to VwVwS (German regulation) appendix 1 dated 17.05.1999

### 13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to instructions of local authorities.
- **European waste catalogue:**  
07 05 99 wastes not otherwise specified
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Diluted caustic solution.

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### 14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -  
No hazardous good according to the regulation.
- **Maritime transport IMDG:**
- **IMDG Class:** No hazardous good according to the regulation.
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** No hazardous good according to the regulation.

### 15 Regulations

- **Markings according to EC guidelines:**  
The substance(product)is not subject to classification according to EC-directives and other sources of literature known to us.  
Observe the general safety regulations when handling chemicals
- **National regulations**
- **Water hazard class:** Not 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:**  
KFT-Chemieservice Marienstr. 3 D-64347 Griesheim  
Postfach 1451 D-64345 Griesheim  
Tel.: +49-6155-823241 Fax: +49-6155-823246
- **Contact:** Angelika Torges