

Material Safety Data Sheet

Castor Oil Product name 1. Identification of the substance/mixture and of the company/undertaking 1.1. Product name Castor oil 8001-79-4 1.2 CAS-No. 1.3. Relevant identified uses of the substance or mixture and uses advised against Identified uses Laboratory chemicals, Synthesis of substances 1.4. Details of the supplier of the safety data sheet Glory Global CO.,LTD Company Address C-208, 10, Nowon-ro 15-gil, Nowon-gu, Seoul, Korea +82 2 6223 0862 Emergency Phone 2. Hazards identification 2.1. Classification of the substance or mixture Not a hazardous substance or mixture. 2.2. GHS Label elements, including precautionary Not a hazardous substance or mixture. 2.3, Hazards not otherwise classified (HNOC) or not None covered by GHS 3. Composition/information on ingredients 3.1. Substances EC No. 232-293-8 CAS-No. 8001-79-4 Component Castor oil Concentration ≤ 100 % 4. First aid measures 4.1. Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2. Most important symptoms and effects, both acute and The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3. Indication of any immediate medical attention and No data available special treatment needed

5. Firefighting measures

5.1. Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture Nature of decomposition products not known.

5.3. Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4. Further information No data available

6. Accidental release measures

6.1. Personal precautions, protective equipment and use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

adequate ventilation.

For personal protection see section 8.

6.2. Environmental precautions Do not let product enter drains.

6.3. Methods and materials for containment and cleaning Soak up with inert absorbent material and dispose of as hazardous waste. Keep in

suitable, closed containers for disposal.

6.4. Reference to other sections For disposal see section 13.

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep container tightly closed in a dry and well-ventilated place.

For precautions see section 2.2.

7.2. Conditions for safe storage, including any

incompatibilities

Storage class (TRGS 510): 12: Non Combustible Liquids 7.3. Specific end use(s) Apart from the uses mentioned in section 1,2 no other specific uses are stipulated

8. Exposure controls/personal protection

8.1. Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Component	CAS-No.	Value	Control parameters	Basis
Castor oil	8001-79-4	TWA	11() ma/m3	USA. NIOSH Recommended Exposure Limits
		TWA	5 mg/m3	USA. NIOSH Recommended Exposure Limits

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

a) Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

b) Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use

Impervious clothing, The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance at the specific

workplace.

d) Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a fullface

respirator with multi-purpose combination (US) or type ABEK (EN 14387)

respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU).

e) Control of environmental exposure Do not let product enter drains.

9. Physical and chemical properties

Melting point/freezing point

Initial boiling point and boiling range

Odour

Odour Threshold

c) Body Protection

9.1. Information on basic physical and chemical properties

Appearance Form: liquid, clear, viscous

Colour: light yellow No data available No data available No data available No data available 313 °C 595 °F

> 113.00 °C (> 235.40 °F) - closed cup Flash point

No data available Evaporation rate Flammability (solid, gas) No data available Upper/lower flammability or explosive limits No data available Vapour pressure No data available Vapour density No data available

0.961 g/mL at 25 °C (77 °F) Relative density

No data available Water solubility

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

No data available

Explosive properties

Oxidizing properties

No data available

10. Stability and reactivity

10.1. Reactivity No data available

10.2. Chemical stability Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
 10.4. Conditions to avoid
 10.5. Incompatible materials
 No data available
 Strong oxidizing agents

10.6. Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Nature of

decomposition products not known.

Other decomposition products - No data available

In the event of fire: see section 5

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity No data available

Inhalation: No data available Dermal: No data available

Skin corrosion/irritation Skin - Human

Result: Mild skin irritation - 48 h

Serious eye damage/eye irritation Eyes - Rabbit

Result: Mild eye irritation

Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available

Carcinogenicity

a) IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

b) ACGIH No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

c) NTP No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

d) OSHA No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

Reproductive toxicity

Specific target organ toxicity – single exposure

Specific target organ toxicity – repeated exposure

Aspiration hazard

Additional Information

No data available

No data available

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

12.1. Toxicity

No data available
12.2. Persistence and degradability
No data available
12.3. Bioaccumulative potential
No data available
12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not

conducted

12.6. Other adverse effects No data available

13. Disposal considerations

13.1 Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging Dispose of as unused product.

14. Transport information

14.1, DOT (US)Not dangerous goods14.2. IMDGNot dangerous goods14.3. IATANot dangerous goods

15. Regulatory information No chemicals in this material are subject to the reporting requirements of SARA Title III, 15.1. SARA 302 Components 15.2. SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. 15.3. SARA 311/312 Hazards No SARA Hazards 15.4. Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act. 15.5. Pennsylvania Right To Know Components Castor oil CAS-No. Revision Date 8001-79-4 15.6. New Jersey Right To Know Components CAS-No. Revision Date 8001-79-4 15.7. California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. 16. Other information 16.1. Further information