## SAFETY DATA SHEET

### Polyoxylethylene castor oil


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

1. **Product identifier**
   - **Product name**: Polyoxylethylene castor oil
   - **Product number**: FP45353
   - **CAS number**: 61791-12-6
   - **EC number**: 500-151-7

2. **Relevant identified uses of the substance or mixture and uses advised against**
   - **Identified uses**: Laboratory reagent. Manufacture of substances. Research and development.

3. **Details of the supplier of the safety data sheet**
   - **Supplier**: Carbosynth Ltd
     - 8&9 Old Station Business Park
     - Compton
     - Berkshire
     - RG20 6NE
     - UK
     - +44 1635 578444
     - +44 1635 579444
     - info@carbosynth.com

4. **Emergency telephone number**
   - **Emergency telephone**: +44 7887 998634

### SECTION 2: Hazards identification

1. **Classification of the substance or mixture**
   - **Classification (EC 1272/2008)**
     - **Physical hazards**: Not Classified
     - **Health hazards**: Not Classified
     - **Environmental hazards**: Not Classified

2. **Label elements**
   - **EC number**: 500-151-7
   - **Hazard statements**: NC Not Classified

3. **Other hazards**
   - No data available.

### SECTION 3: Composition/information on ingredients

1. **Substances**
   - **Product name**: Polyoxylethylene castor oil
   - **CAS number**: 61791-12-6
Polyoxyethylene castor oil

EC number 500-151-7

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Get medical advice/attention if you feel unwell.

Inhalation
Remove person to fresh air and keep comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration. Get medical attention if symptoms are severe or persist.

Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if symptoms are severe or persist.

Skin contact
Remove contaminated clothing. Rinse with water. Continue to rinse for at least 15 minutes. Wash contaminated clothing before reuse. Get medical attention if symptoms are severe or persist.

Eye contact
Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

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

General information
See Section 11 for additional information on health hazards.

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

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
None known.

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid inhalation of vapours. Provide adequate ventilation. Keep unnecessary and unprotected personnel away from the spillage.

6.2. Environmental precautions

Environmental precautions
Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up
Polyoxyethylene castor oil

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Absorb spillage with sand or other inert absorbent. Clear up spills immediately and dispose of waste safely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Provide adequate ventilation. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Wear protective clothing as described in Section 8 of this safety data sheet. Wash hands thoroughly after handling. Provide adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep container tightly closed. Store in a cool and well-ventilated place. Store at room temperature.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

No exposure limits known for ingredient(s).

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties
Polyoxyethylene castor oil

**Appearance**
Liquid.

**Colour**
Colourless. to Yellow.

**Odour**
No data available.

**Odour threshold**
No data available.

**pH**
No data available.

**Melting point**
No data available.

**Initial boiling point and range**
No data available.

**Flash point**
No data available.

**Evaporation rate**
No data available.

**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.

**Relative density**
1.050

**Solubility(ies)**
No data available.

**Partition coefficient**
No data available.

**Auto-ignition temperature**
No data available.

**Decomposition Temperature**
No data available.

**Viscosity**
No data available.

**Explosive properties**
No data available.

**Oxidising properties**
No data available.

9.2. Other information

### SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity**
No data available.

10.2. Chemical stability

**Stability**
Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions**
No data available.

10.4. Conditions to avoid

**Conditions to avoid**
No data available.

10.5. Incompatible materials

**Materials to avoid**
Strong oxidising agents.

10.6. Hazardous decomposition products
Polyoxyethylene castor oil

Hazardous decomposition products
Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects
Not regarded as a health hazard under current legislation.

Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.

Skin corrosion/irritation
Animal data
Based on available data the classification criteria are not met.

Serious eye damage/irritation
Serious eye damage/irritation
Based on available data the classification criteria are not met.

Respiratory sensitisation
Respiratory sensitisation
Based on available data the classification criteria are not met.

Skin sensitisation
Skin sensitisation
Based on available data the classification criteria are not met.

Germ cell mutagenicity
Genotoxicity - in vitro
Based on available data the classification criteria are not met.

Carcinogenicity
Carcinogenicity
Based on available data the classification criteria are not met.

IARC carcinogenicity
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.

Reproductive toxicity
Reproductive toxicity - fertility
Based on available data the classification criteria are not met.

Reproductive toxicity - development
Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
STOT - single exposure
Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard
Aspiration hazard
Based on available data the classification criteria are not met.

General information
No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
No specific symptoms known. Spray/mists may cause respiratory tract irritation.

Ingestion
No specific symptoms known. May cause discomfort if swallowed.
Polyoxyethylene castor oil

Skin contact
No specific symptoms known. May cause discomfort.

Eye contact
No specific symptoms known. May be slightly irritating to eyes.

Route of exposure
Ingestion Inhalation Skin and/or eye contact

Target organs
No specific target organs known.

SECTION 12: Ecological Information

Ecotoxicity
Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish
LC₅₀, 48 hour: 448 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hour: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants
EC₅₀, 72 hour: > 93 mg/l, Desmodesmus subspicatus

12.2. Persistence and degradability

Persistence and degradability
The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient
No data available.

12.4. Mobility in soil

Mobility
No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment
This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered.

SECTION 14: Transport information

General
The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.
Polyoxyethylene castor oil

14.3. Transport hazard class(es)
No transport warning sign required.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

Inventories
US - TSCA
Present.

SECTION 16: Other information
Polyoxyethylene castor oil

**Abbreviations and acronyms used in the safety data sheet**

- **ADR:** European Agreement concerning the International Carriage of Dangerous Goods by Road.
- **ADN:** European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
- **RID:** European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- **IATA:** International Air Transport Association.
- **ICAO:** Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- **IMDG:** International Maritime Dangerous Goods.
- **CAS:** Chemical Abstracts Service.
- **ATE:** Acute Toxicity Estimate.
- **LC₅₀:** Lethal Concentration to 50% of a test population.
- **LD₅₀:** Lethal Dose to 50% of a test population (Median Lethal Dose).
- **EC₅₀:** 50% of maximal Effective Concentration.
- **PBT:** Persistent, Bioaccumulative and Toxic substance.
- **vPvB:** Very Persistent and Very Bioaccumulative.

**Training advice**

Only trained personnel should use this material.

**Revision date**

05/02/2018

**Revision**

1

**SDS number**

144929

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user’s responsibility to satisfy himself as to the suitability of such information for his own particular use.