

1 Chemical product and Company Identification:

- Identification of Product
Commercial Product Name **Castor Oil**
- Use of the substance: in lubricants, polymer resins, vanishes, coatings, auxiliary for foundry, paints, lacquers, plastic and electro industry, auxiliary for the fibre, textile and leather industry, in plasticizers, in printing inks, wetting agents and lubricants
- Supplier:
Supplier: Alliance Chemicals Pte Ltd, 9 Toh Guan Road East,
Alliance Building, Singapore 608604
- Emergency Telephone: +65 68615188

2 Hazard Identification

- Hazard Identification: None
- Special Hazard Identification: None

3 Composition/ Information on Ingredients

- Substance/Mixture : Substance
- Composition : 100 % weight
- Chemical name : Castor Oil
- Synonym : Ricinus oil
- CAS registry number : **8001-79-4**
- EINECS : 232-298-8
- Chemical formula : $C_{54}H_{100}O_7$
- Chemical Characterization :
Triglyceride of fatty acids, 85-90% ricinoleic acid, 6-2% oleic acid,
5-1% linoleic acid, 5-0.5% linolenic acid, 2-0.5% palmitic acid
1-0.5% stearic acid, 1-0.5% Arachic acid, 0.5-0.3% dihydroxystearic acid
- UN class : Not applicable.
- UN number : Not applicable.
- Hazardous Ingredient : None

4 First Aid Measures

- General Information: None
- Inhalation: n.a.
- Skin Contact: Clean with water and soap.
- Eye Contact: Rinsing under running water 10-15 minute.
- Ingestion: Contact a Physician.

5 Fire Fighting

- Suitable Extinguishing Media: Water mist, CO₂, foam, dry powder
- Unsuitable Extinguishing Media: Water
- Special Protective Clothing: n.a.

6 Accidental Release Measures

- After Spillage/ Leakage Absorb with sand, saw dust or other absorbent material

7 Handling and Storage

- Safe Handling: Do not bring in contact with strong oxidizing agents
- Prevent Fire – Explosion: Difficulty inflammable. Avoid open fires.
- Packing Material: Steel Containers
- Storage requirements: Store at a temperature of +10 °C to +30 °C and dark
- Storage classification: None

8 Exposure Controls and Personal Protection

- Engineering Protection: None
- Personal Protection: General hygienic measures, normal washing or showering.
Keep working cloth separated from normal clothing.
- Respiratory Protection: Not necessary
- Hand & Eye Protection: Not necessary

9 Physical and Chemical Properties

- Appearance: Form: Liquid
Colour: Light yellow-green
Odour: Practically odourless
- Physical data and safety data:

Change in Physical State:	Dehydrate:	Above +200 °C	
	Fusion Point:	About – 24 °C	
Density:	20 °C	0.960	g/cm ³
Viscosity:	20 °C	950 -1,100	mPa s Hoppler
Vapour Pressure:	20 °C	< 1 mbar	
	100 °C	< 1 mbar	
Soluble in water,	°C	Insoluble	
pH, as is	g/l water, 20 °C:	n.a.	
Flash Point:		255-300 °C	Marcusson
Flammability:		n.a.	
Ignition Temperature:		450 °C	
Explosion Limit:		n.e.	

10 Stability and Reactivity

- Condition to avoid: None
- Materials to avoid: Do not bring in contact with strong oxidizing agents.
- Hazardous Decomposing Products: In air from about 300 °C: Acroleine.
- Further Information: When use properly only very slow decomposition.
Dehydrated at about 200 °C

11 Toxicological Information

Non-irritating and no health hazards known

12 Ecological Information

Decomposable as vegetable oils and fats (n.e. experimentally)

The oil can be separated with an oil or grease separator from subsoil water or in sewerage clarification plant

13 Disposal Considerations

- Product

Recommendation: Refuse incineration, special waste dump with allowance from local officials.

Disposal Code Number: 020399

- Soiled Packaging

Recommendation: Clean with base

Cleansing agent: Suds, detergent

14 Transport Information

IMDG code: --- UN No. --- ICAO/IATA-DGR: ---

RID/ADR: --- No.: ---

Other Information:

Comment: Not necessary as to the above mentioned transport regulations.

15 Regulatory Information

- According to the Legislation of the German Federal Republic
Labelling according to “Arbeitsstoff-Verordnung”/ “Gefahrstoff-Verordnung”

Identification Letter and Hazard Symbols of the product: None

Dangerous components relevant for labeling: None

R-phrases: None

S-phrases: None

Specification Characterization Definite Preparations: None

- National Regulation:

Reference to Employment Restrictions: None

Technical direction air: None

Water pollution Classification: Substance not hazardous to water

Further Regulations, Restrictions and Directives: None

16 Other Information

None