



SAFETY DATA SHEET CASTOR OIL REVISION 5, DATE 12 AUG 2025

1. IDENTIFICATION

| | |
|----------------------------|--|
| Product Name | Castor Oil |
| Other Names | Castor Oil FSG; Triglyceride of castor oil acid |
| Uses | Used in the manufacturing of soaps, lubricants, hydraulic and brake fluids, paints, dyes, coatings, inks, cold resistant plastics, waxes and polishes, nylon, pharmaceuticals and perfumes. Restriction on use: No information available. |
| Chemical Family | No Data Available |
| Chemical Formula | Unspecified |
| Chemical Name | Castor oil |
| Product Description | No Data Available |

Contact Details of the Supplier of this Safety Data Sheet

| Organisation | Location | Telephone |
|-------------------------|--|------------------|
| Redox Ltd | 2 Swettenham Road Minto NSW 2566 Australia | +61-2-97333000 |
| Redox Ltd | 11 Mayo Road Wiri Auckland 2104 New Zealand | +64-9-2506222 |
| Redox Inc. | 3960 Paramount Boulevard Suite 107 Lakewood CA 90712 USA | +1-424-675-3200 |
| Redox Chemicals Sdn Bhd | Suite 13A.03, Menara Summit Persiaran Kewajipan USJ1 47600 UEP Subang Jaya Selangor, Malaysia | +60-3-5614-2111 |

Emergency Contact Details

For emergencies only; DO NOT contact these companies for general product advice.

| Organisation | Location | Telephone |
|----------------------------|--------------------------|--|
| Poisons Information Centre | Australia – Westmead NSW | 1800-251525 131126 |
| Chemcall | Australia | 1800-127406 +64-4-9179888 |
| Chemcall | Malaysia | +64-4-9179888 |
| National Poison Centre | Malaysia | +60-4-6536-999 |
| Chemcall | New Zealand | 0800-243622 +64-4-9179888 |
| National Poisons Centre | New Zealand | 0800-764766 |
| CHEMTREC | USA & Canada | 1-800-424-9300 CN723420 +1-703-527-3887 |

2. HAZARD IDENTIFICATION



Poisons Schedule (Aust) Not Scheduled

Globally Harmonised System

Hazard Classification NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Signal Word None

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Safe Work Australia

National Guide for Classifying Hazardous Chemicals under the Model WHS Regulations

Hazard Classification NOT hazardous according to the criteria of Safe Work Australia under Model WHS Regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

| Chemical Entity | Formula | CAS Number | Proportion |
|-----------------|-------------|------------|------------|
| Castor oil | Unspecified | 8001-79-4 | 100 % |

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

| | |
|--|---|
| Swallowed | IF SWALLOWED: Rinse mouth with water. Do not induce vomiting. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person. |
| Eye | IF IN EYES: Do not rub affected area! Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention. *Suitable emergency eye wash facility should be immediately available. |
| Skin | IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention. *Suitable emergency safety shower facility should be immediately available. |
| Inhaled | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. |
| Advice to Doctor | Treat symptomatically. *Most important symptoms and effects, both acute and delayed: No information available. *Indication of any immediate medical attention and special treatment needed: No information available. |
| Medical Conditions Aggravated by Exposure | No information available. |

5. FIRE FIGHTING MEASURES

| | |
|---|--|
| General Measures | If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out. Dike fire-control water for later disposal. |
| Flammability Conditions | Combustible material; May burn but does not ignite readily. |
| Extinguishing Media | Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction. Do not scatter spilled material with high-pressure water streams. |
| Fire and Explosion Hazard | Containers may explode when heated. When heated, vapours may form explosive mixtures with air. |
| Hazardous Products of Combustion | Fire may produce irritating and/or toxic gases, including Carbon oxides. |
| Special Fire Fighting Instructions | Contain runoff from fire control or dilution water - Runoff may cause pollution. |
| Personal Protective Equipment | Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. |
| Flash Point | 229 °C [Closed cup] |
| Lower Explosion Limit | No Data Available |
| Upper Explosion Limit | No Data Available |
| Auto Ignition Temperature | 449 °C |
| Hazchem Code | No Data Available |

6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| General Response Procedure | Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material - danger of slipping. Avoid breathing mist/vapours and contact with eyes, skin and clothing. |
| Clean Up Procedures | Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). |
| Containment | Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Dike far ahead of large spill for later disposal. |
| Decontamination | Wash area down with detergent and excess water. |
| Environmental Precautionary Measures | Prevent entry into drains and waterways. |
| Evacuation Criteria | Spill or leak area should be isolated immediately. Keep unauthorised personnel away. |
| Personal Precautionary Measures | Use personal protective equipment as required (see SECTION 8). |

7. HANDLING AND STORAGE

| | |
|------------------|---|
| Handling | Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapours/mist and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). |
| Storage | Store in a cool, dry and well-ventilated place, out of direct sunlight. Protect from freezing. Keep container tightly closed when not in use - check regularly for leaks. Keep away from heat and sources of ignition - No smoking. Keep away from foodstuffs and incompatible materials (see SECTION 10). |
| Container | Keep in the original container. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|--------------------------------------|--|
| General | No specific exposure standards are available for this product. |
| Exposure Limits | No Data Available |
| Biological Limits | No information available. |
| Engineering Measures | A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. |
| Personal Protection Equipment | <ul style="list-style-type: none">- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Organic vapour/particulate respirator (refer to AS/NZS 1715 & 1716).- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or goggles.- Hand protection: Handle with gloves. Recommended: Impervious gloves, e.g. Nitrile rubber.- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes. |
| Special Hazards Precautions | No information available. |
| Work Hygienic Practices | Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|---|
| Physical State | Liquid |
| Appearance | Viscous Liquid |
| Odour | Vegetable oil |
| Colour | Yellowish to amber |
| pH | No Data Available |
| Vapour Pressure | No Data Available |
| Relative Vapour Density | No Data Available |
| Boiling Point | 313 °C |
| Melting Point | No Data Available |
| Freezing Point | No Data Available |
| Solubility | Insoluble in water - Soluble in ethanol at room temperature |
| Specific Gravity | 0.96 (Water = 1) |
| Flash Point | 229 °C [Closed cup] |
| Auto Ignition Temp | 449 °C |
| Evaporation Rate | No Data Available |
| Bulk Density | No Data Available |
| Corrosion Rate | No Data Available |
| Decomposition Temperature | No Data Available |
| Density | No Data Available |
| Specific Heat | No Data Available |
| Molecular Weight | No Data Available |
| Net Propellant Weight | No Data Available |
| Octanol Water Coefficient | No Data Available |
| Particle Size | No Data Available |
| Partition Coefficient | No Data Available |
| Saturated Vapour Concentration | No Data Available |
| Vapour Temperature | No Data Available |
| Viscosity | No Data Available |
| Volatile Percent | No Data Available |
| VOC Volume | No Data Available |

| | |
|---|--|
| Additional Characteristics | No information available. |
| Potential for Dust Explosion | Not applicable. |
| Fast or Intensely Burning Characteristics | No information available. |
| Flame Propagation or Burning Rate of Solid Materials | No information available. |
| Non-Flammables That Could Contribute Unusual Hazards to a Fire | No information available. |
| Properties That May Initiate or Contribute to Fire Intensity | Combustible material; May burn but does not ignite readily. |
| Reactions That Release Gases or Vapours | Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides. |
| Release of Invisible Flammable Vapours and Gases | When heated, vapours may form explosive mixtures with air. |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| General Information | No information available. |
| Chemical Stability | Stable under normal conditions of use. |
| Conditions to Avoid | Keep away from heat and sources of ignition. Avoid freezing. |
| Materials to Avoid | Incompatible/reactive with strong oxidising agents. |
| Hazardous Decomposition Products | Fire/decomposition may produce irritating and/or toxic gases, including Carbon oxides. |
| Hazardous Polymerisation | Hazardous polymerisation will not occur. |

11. TOXICOLOGICAL INFORMATION

| | |
|----------------------------|--|
| General Information | <p>Information on toxicological effects:</p> <ul style="list-style-type: none">- Acute toxicity: No information available.- Skin corrosion/irritation: No information available.- Serious eye damage/irritation: No information available.- Respiratory/skin sensitisation: No information available.- Germ cell mutagenicity: No information available.- Carcinogenicity: No information available.- Reproductive toxicity: No information available.- STOT (single exposure): No information available.- STOT (repeated exposure): No information available.- Aspiration toxicity: No information available. <p>Information on likely routes of exposure:</p> <ul style="list-style-type: none">- Ingestion: May cause gastrointestinal discomfort if consumed in large amounts.- Eye contact: Mild eye irritation.- Skin contact: May cause irritation.- Inhalation: May cause irritation of respiratory tract. <p>Chronic effects: No information available.</p> |
| Acute | |
| Ingestion | <p>Acute toxicity (Oral):</p> <ul style="list-style-type: none">- LD50, Rat: >5,000 mg/kg [based on data taken from similar product]. |
| Carcinogen Category | None |

12. ECOLOGICAL INFORMATION

| | |
|----------------------------------|---|
| Ecotoxicity | Aquatic toxicity: - LC50, Fish: >100 mg/L - EC50, Bacteria: >100 mg/L |
| Persistence/Degradability | Readily biodegradable. |
| Mobility | Is not likely mobile in the environment due its low water solubility. |
| Environmental Fate | Prevent entry into drains and waterways. |
| Bioaccumulation Potential | No information available. |
| Environmental Impact | No Data Available |

13. DISPOSAL CONSIDERATIONS

| | |
|--|---|
| General Information | Dispose of contents/container in accordance with local/regional/national regulations. |
| Special Precautions for Land Fill | No information available. |

14. TRANSPORT INFORMATION**Land Transport (Australia)**

ADG Code

| | |
|-----------------------------|--|
| Proper Shipping Name | Castor Oil |
| Class | C2 Combustible Liquids - Flash Point >93°C, Closed Cup, Not Excluded Flammable |
| Subsidiary Risk(s) | No Data Available No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (India)

| | |
|-----------------------------|--|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (Malaysia)

ADR Code

| | |
|-----------------------------|--|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (New Zealand)

NZS5433

| | |
|-----------------------------|--|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Land Transport (United States of America)

US DOT

| | |
|-----------------------------|--|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for LAND transport. |

Sea Transport

IMDG Code

| | |
|-----------------------------|-------------------|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| EMS | No Data Available |
| Marine Pollutant | No |

Comments NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

IATA DGR

| | |
|-----------------------------|---|
| Proper Shipping Name | Castor Oil |
| Class | No Data Available |
| Subsidiary Risk(s) | No Data Available |
| UN Number | No Data Available |
| Hazchem | No Data Available |
| Pack Group | No Data Available |
| Special Provision | No Data Available |
| Comments | NON-DANGEROUS GOODS: Not regulated for AIR transport. |

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

| | |
|---------------------------------------|---|
| Dangerous Goods Classification | NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) |
|---------------------------------------|---|

15. REGULATORY INFORMATION

| | |
|----------------------------|-------------------|
| General Information | No Data Available |
|----------------------------|-------------------|

| | |
|--------------------------------|---------------|
| Poisons Schedule (Aust) | Not Scheduled |
|--------------------------------|---------------|

Environmental Protection Authority (New Zealand)

Hazardous Substances and New Organisms Amendment Act 2015

| | |
|----------------------|---------------|
| Approval Code | Not Hazardous |
|----------------------|---------------|

National/Regional Inventories

| | |
|---|----------------|
| Australia (AIIIC) | Listed |
| Canada (DSL) | Listed |
| Canada (NDSL) | Not Listed |
| China (IECSC) | Listed |
| Europe (EINECS) | 232-293-8 |
| Europe (REACH) | Not Determined |
| Japan (ENCS/METI) | Not Determined |
| Korea (KECI) | Listed |
| Malaysia (List of Classified Substances) | Not Listed |
| New Zealand (NZIoC) | Listed |

| | |
|---------------------|--------|
| Philippines (PICCS) | Listed |
| Taiwan (TCSI) | Listed |
| USA (TSCA) | Listed |
| Mexico (INSQ) | Listed |

16. OTHER INFORMATION

Related Product Codes

CASOIL0500, CASOIL1000, CASOIL1001, CASOIL1002, CASOIL1003, CASOIL1004, CASOIL1005, CASOIL1006, CASOIL1007, CASOIL1008, CASOIL1009, CASOIL1010, CASOIL1011, CASOIL1012, CASOIL1013, CASOIL1014, CASOIL1015, CASOIL1016, CASOIL1017, CASOIL1018, CASOIL1019, CASOIL1020, CASOIL1021, CASOIL1022, CASOIL1023, CASOIL1024, CASOIL1025, CASOIL1026, CASOIL1027, CASOIL1028, CASOIL1029, CASOIL1030, CASOIL1031, CASOIL1032, CASOIL1033, CASOIL1034, CASOIL1035, CASOIL1036, CASOIL1037, CASOIL1038, CASOIL1039, CASOIL1040, CASOIL1041, CASOIL1042, CASOIL1043, CASOIL1044, CASOIL1045, CASOIL1051, CASOIL1054, CASOIL1055, CASOIL1058, CASOIL1100, CASOIL1106, CASOIL1107, CASOIL1108, CASOIL1109, CASOIL1110, CASOIL1155, CASOIL1199, CASOIL1200, CASOIL1205, CASOIL1206, CASOIL1208, CASOIL1218, CASOIL1235, CASOIL1236, CASOIL1240, CASOIL1245, CASOIL1288, CASOIL1300, CASOIL1350, CASOIL1400, CASOIL1450, CASOIL1451, CASOIL1452, CASOIL1500, CASOIL1501, CASOIL1502, CASOIL1510, CASOIL1600, CASOIL1601, CASOIL1640, CASOIL1650, CASOIL1660, CASOIL1665, CASOIL1666, CASOIL1667, CASOIL1668, CASOIL1670, CASOIL1671, CASOIL1680, CASOIL1681, CASOIL1686, CASOIL1700, CASOIL1710, CASOIL1715, CASOIL1750, CASOIL1800, CASOIL1888, CASOIL1889, CASOIL1890, CASOIL1900, CASOIL2000, CASOIL2001, CASOIL2002, CASOIL2010, CASOIL2020, CASOIL2021, CASOIL2023, CASOIL2025, CASOIL2026, CASOIL2028, CASOIL2050, CASOIL2100, CASOIL2200, CASOIL2222, CASOIL2300, CASOIL2400, CASOIL2401, CASOIL2402, CASOIL2403, CASOIL2404, CASOIL2405, CASOIL2406, CASOIL2407, CASOIL2408, CASOIL2409, CASOIL2500, CASOIL2600, CASOIL2700, CASOIL3000, CASOIL3001, CASOIL3002, CASOIL3003, CASOIL3200, CASOIL3350, CASOIL3500, CASOIL3501, CASOIL3600, CASOIL3800, CASOIL3900, CASOIL4000, CASOIL4100, CASOIL4500, CASOIL5000, CASOIL5001, CASOIL5200, CASOIL5500, CASOIL6000, CASOIL6100, CASOIL6101, CASOIL6102, CASOIL6103, CASOIL6200, CASOIL6300, CASOIL6500, CASOIL6501, CASOIL7000, CASOIL7500, CASOIL8000, CASOIL8001, CASOIL8200, CASOIL8500, CASOIL8605, CASOIL8610, CASOIL8900, CASOIL8910, CASOIL8915, CASOIL9400, CASOIL9401, CASOIL9500, CASOIL9600, CASOIL9700

Revision

5

Revision Date

12 Aug 2025

Reason for Issue

Updated SDS

Key/Legend

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

EPA (New Zealand) Environmental Protection Authority of New Zealand

deg F (°F) Degrees Fahrenheit

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluble in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

lb Pound

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or **L** Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or **Miscible** Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

Oz Ounce

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

ppm Parts per Million

ppm/2h Parts per Million per 2 Hours

ppm/6h Parts per Million per 6 Hours

psi Pounds per Square Inch

R Rankine

RCP Reciprocal Calculation Procedure

STEL Short Term Exposure Limit

TLV Threshold Limit Value

tne Tonne

TWA Time Weighted Average

ug/24H Micrograms per 24 Hours

UN United Nations

wt Weight