

GLYCEROL TRIBUTYRATE (Tributyrin)

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: GLYCEROL TRIBUTYRATE (Tributyrin)

Product Code: 851 CAS#: 60-01-5 CI#: Not available

Synonym: Glycerol tributyrate; 1,2,3-Tributyrylglycerol; Glyceryl tributyrate; Tributyrin.

Chemical Name: Tributyrin. Chemical Formula: C₁₅H₂₆O₆ Molecular Weight: 302.36

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:

Name: Glycerol Tributyrate (Tributyrin)

Toxicological Data on Ingredients: Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

This substance is not classified as dangerous according to Directive 67/548/EEC

SECTION 3: HAZARDS IDENTIFICATION

Potential Acute Health Effects: Slightly hazardous in case of eye contact (irritant)

Potential Chronic Health Effects: Carcinogenic effects: Not available. Mutagenic effects: Not available. Teratogenic effects: Not available.

Developmental toxicity: Repeated exposure to a highly toxic material may produce general deterioration of health by

an accumulation in one or many human organs

SECTION 4: FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of

water for at least 15 minutes. WARM water MUST be used. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation

develops.

Serious Skin Contact: Not available. **Serious Inhalation:** Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight

clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available

SECTION 5: FIRE AND EXPLOSION DATA

Flammability of the Product: May be combustible at high temperature

Auto-Ignition Temperature: 407.22°C (765°F)

Flash Points: CLOSED CUP: 173°C (343.4°F) OPEN CUP: 180°C (356°F).

Flammable Limits: LOWER: 0.5%.

Products of Combustion: Carbon oxides











MATERIAL SAFETY DATA SHEET

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact:

Not available. Slightly explosive in presence of open flames and sparks.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. **Large Spill:** Poisonous liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION 7: HANDLING AND STORAGE

Precautions: Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Safety glasses, Lab coat, Dust respirator, Gloves. Be sure to use an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form : Colorless clear liquid Colour : Not available Odour : Not available **Odour Threshold** : Not available рΗ : Not available Melting point/freezing point : Not available Initial boiling point and boiling range : 129 - 131ºC Flash point : Not available **Evaporation rate** : Not available Flammability (solid, gas) : Not available Upper/lower flammability or explosive limits : Not available Vapour pressure : Not available Vapour density : Not available : Not available Relative density



MATERIAL SAFETY DATA SHEET

Water solubility : Not available
Auto-ignition temperature : Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excessive heat, ignition sources, incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosively: Not applicable

Special Remarks on Reactivity: Not available. **Special Remarks on Corrosively:** Not available.

Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity to Animals: Inhalation. Ingestion.

LD50: Oral - Rat - 3,200 mg/kg

LC50: Not available.

Chronic Effects on Humans: Not available.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects

Skin: May cause irritation. May be absorbed through skin.

Eyes: May cause eye irritation.

Inhalation: May cause respiratory tract irritation. Ingestion: May cause digestive tract irritation. May affect

behavior (convulsions) and respiration (respiratory depression).

It is expected to be a low ingestion hazard. The toxicological properties of this substance have not been fully

investigated

SECTION 12: ECOLOGICAL INFORMATION

Eco toxicity: Not available. **BOD5 and COD:** Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: IMDG: IATA:

UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods Transport hazard class(es):

ADR/RID: IMDG: IATA:



MATERIAL SAFETY DATA SHEET

Packaging group:

ADR/RID: IMDG: IATA:

Environmental hazards:

ADR/RID: No IMDG Marine pollutant: No IATA: No

Special precautions for user:

Further information: Not classified as dangerous in the meaning of transport regulations

SECTION 15: OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory

Tributyrin

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSD (EEC): This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.): Health Hazard: 1 Fire Hazard: 1 Reactivity: 0

Personal Protection: G

National Fire Protection Association (U.S.A.):

Health Hazard: 0 Fire Hazard: 1 Reactivity: 0

Personal Protection:

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements. Not available

Other Special Considerations: Not available

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