Material Safety Data Sheet
Tributyrin

ACC# 96660

Section 1 - Chemical Product and Company Identification

MSDS Name: Tributyrin
Catalog Numbers: AC150880000, AC150881000, ACE1082387, 15088-2500
Synonyms: Glycerol tributyrate.
Company Identification:
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-01-5</td>
<td>Tributyrin</td>
<td>97+</td>
<td>200-451-5</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

Caution! May cause eye, skin, and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

Target Organs: None known.

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.
Chronic: No information found.

Section 4 - First Aid Measures
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Do not induce vomiting. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** 173 deg C (343.40 deg F)

**Autoignition Temperature:** 407 deg C (764.60 deg F)

**Explosion Limits, Lower:** 0.5 vol %

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 1; Instability: 0

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**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation. Do not let this chemical enter the environment.

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**Section 7 - Handling and Storage**

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tributyrin</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Tributyrin: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: clear, colorless
Odor: none reported
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 305 - 310 deg C @ 760 mmHg
Freezing/Melting Point: -75 deg C
Decomposition Temperature: Not available.
Solubility: insoluble
Specific Gravity/Density: 1.034
Molecular Formula: C15H26O6
Molecular Weight: 302.36

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: 
CAS# 60-01-5: ET7350000
LD50/LC50:
CAS# 60-01-5:
Oral, mouse: LD50 = 12800 mg/kg;
Oral, rat: LD50 = 3200 mg/kg;

Carcinogenicity:
CAS# 60-01-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** No information found  
**Neurotoxicity:** No information found  
**Other Studies:**

### Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.  
**Environmental:** No information available.  
**Physical:** No information available.  
**Other:** Do not empty into drains.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  
**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.

### Section 14 - Transport Information

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<thead>
<tr>
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<th>US DOT</th>
<th>Canada TDG</th>
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</thead>
<tbody>
<tr>
<td><strong>Shipping Name:</strong></td>
<td>Not regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td><strong>Hazard Class:</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>UN Number:</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Packing Group:</strong></td>
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</tbody>
</table>

### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**  
CAS# 60-01-5 is listed on the TSCA inventory.  

**Health & Safety Reporting List**  
None of the chemicals are on the Health & Safety Reporting List.  

**Chemical Test Rules**  
None of the chemicals in this product are under a Chemical Test Rule.  

**Section 12b**
None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**Section 313**
No chemicals are reportable under Section 313.

**Clean Air Act:**
- This material does not contain any hazardous air pollutants.
- This material does not contain any Class 1 Ozone depleters.
- This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**
- None of the chemicals in this product are listed as Hazardous Substances under the CWA.
- None of the chemicals in this product are listed as Priority Pollutants under the CWA.
- None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
- CAS# 60-01-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
Not available.

**Risk Phrases:**

**Safety Phrases:**
- S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**
- CAS# 60-01-5: No information available.

**Canada - DSL/NDSL**
- CAS# 60-01-5 is listed on Canada’s DSL List.

**Canada - WHMIS**
- This product has a WHMIS classification of Not controlled.
  This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

**Section 16 - Additional Information**

**MSDS Creation Date:** 9/02/1997
**Revision #8 Date:** 2/06/2008

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