1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

**Chemical Name:** 1,2,3-Tri-O-acetyl-5-deoxy-β-D-ribofuranose

**Product Code:** MT05315

**Synonyms:** 1,2,3-Triacetyl-5-deoxy-D-ribose

**Recommended uses:** For R&D purposes

**Supplier:** Carbosynth Ltd, 8&9 Old Station Business Park, Compton, Berkshire, RG20 6NE, UK.

**Emergency contact numbers:**
- Telephone: +44 (0)1635 578 444
- Fax: +44 (0)1635 579 444
- Mobile: +44 (0)7887 998 634

2. HAZARDS IDENTIFICATION

**Classification:**
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 or GHS. Not a hazardous substance or mixture according to EC-Directives 67/548/EEC or 1999/45/EC.

**Labelling and precautionary statements:**
The product does not need to be labeled in accordance with EC directives or respective national laws.

- **Hazard statement(s):** Not required.
- **Precautionary statement(s):** Not required.
- **Hazard symbol(s):** Not required.
- **R-phrase(s):** Not required.
- **S-phrase(s):** Not required.

3. COMPOSITION/INFORMATION ON INGREDIENTS

**Molecular Formula:** C_{11}H_{16}O_{7}

**Molecular weight:** 260.24

**CAS Number:** 62211-93-2

**EINECS Number:** -

**Synonyms:** 1,2,3-Triacetyl-5-deoxy-D-ribose

4. FIRST AID MEASURES

- **Eye contact:** Immediately flush eye with copious amounts of water for at least 15 minutes. Get medical aid immediately.

- **Skin contact:** In case of contact remove contaminated clothing and immediately wash affected areas with copious quantities of
water and soap for at least 15 minutes. Get medical aid immediately. Wash contaminated clothing before reuse.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Get medical aid.

**Ingestion:** Never give anything by mouth to an unconscious person. Wash out mouth with water provided person is conscious. Call a physician.

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

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5. **FIRE-FIGHTING MEASURES**

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

**Extinguishing media:** In case of fire use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

**Special hazards arising from the substance or mixture:** Carbon oxides.

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6. **ACCIDENTAL RELEASE MEASURES**

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

**Personal precautions:** Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.

**Environmental precautions:** Do not let product enter the drains.

**Spills/Leaks:** Vacuum or sweep up and place the material in appropriate container for disposal and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

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7. **HANDLING AND STORAGE**

**Handling:** Wash hands and face thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage:** Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from incompatible materials such as oxidizing agents. Protect from light. Refrigerate. Keep cold. Store at 2-8°C.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

**Personal protection equipment:**
- **Eye protection:** Wear appropriate protective eyeglasses with side-shields conforming to EN 166, chemical safety goggles or face-shield (min. 8-inch) as described by OSHA's eye and face protection regulations. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- **Skin protection:** Must wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.
- **Body protection:** Appropriate protective clothing, overalls.
- **Respiratory protection:** Where risk assessment indicates air-purifying respirators are required use a dust mask type N95 (US) or type P1 (EN 143) respirator. Respirators and components must tested and approved under appropriate government standards - NIOSH (US) or CEN (EU).
- **Hygiene measures:** Use good working practices. Wash hands and face thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to off-white solid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>pH</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Melting point</td>
<td>67°C.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability or explosive limits</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Density</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble (ethanol).</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Data not available/does not apply.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY
11. TOXICOLOGICAL INFORMATION

RTCS #: Data not available.
Acute toxicity: Data not available.
Skin corrosion/irritation: Data not available.
Serious eye damage/eye irritation: Data not available.
Respiratory or skin sensitization: Data not available.
Germ cell mutagenicity: Data not available.
Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Reproductive toxicity: Data not available.
Specific target organ toxicity - single exposure: Data not available.
Specific target organ toxicity - repeated exposure: Data not available.
Aspiration hazard: Data not available.
Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Potential health effects:
Eye: May cause eye irritation.
Skin: May be harmful by skin absorption.
Ingestion: May cause skin irritation.
Inhalation: May be harmful if swallowed.
Chronic: May be harmful if inhaled.

12. ECOLOGICAL INFORMATION

Data not available.

13. DISPOSAL CONSIDERATIONS

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Observe all federal, state and local environmental regulations. Mix or dissolve the material in a combustible solvent and burn in chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

**ADR/RID**
Not classified as hazardous for transport.

**IMDG**
Not classified as hazardous for transport.

**IATA**
Not classified as hazardous for transport.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. ADDITIONAL INFORMATION

Further information on PPE:
European Standard & performance category markings:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Marking</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN143</td>
<td></td>
<td>Particulates filter.</td>
</tr>
<tr>
<td>EN166</td>
<td></td>
<td>Standard for eye protection.</td>
</tr>
<tr>
<td>EN374</td>
<td></td>
<td>Protects hands against chemicals and/or microorganisms.</td>
</tr>
</tbody>
</table>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 unless specified in the text.