Material Safety Data Sheet
Liquid Sugar

Section 1: Identification Of The Material And Supplier

Product name: Liquid Sugar
Company Identification: Tradeasia International Pte Limited
Address: 133 Cecil Street # 12-03 Keck Seng Tower, Singapore
Tel: +65-6227 6365
Fax: +65-6225 6286
Email: contact@chemtradeasia.com

Section 2: Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sucrose</td>
<td>57-50-1</td>
<td>66-68%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>32-34%</td>
</tr>
</tbody>
</table>

Section 2: Hazards Identification

STATEMENT OF HAZARDOUS NATURE: classified as Non Hazardous.

Liquid Sugar is classified as Non-Dangerous Goods for the Transport of Dangerous Goods by Road and Rail.

Note: This product is a well known ingredient in food and beverages and this Material Safety Data Sheet is concerned only with occupational exposures.

Section 4: First Aid Measures

Eye: Flush thoroughly with copious amounts of running water. If symptoms persist, seek medical attention.
Skin: Wash thoroughly with soap and water.
Inhaled: Remove to fresh air.
Advice to Doctor: Treat symptomatically. People with diabetes may need stabilisation.
Section 5: Fire Fighting Measures

Specific Hazards: Incompatible with strong oxidising agents.

Flammability: Low, product will burn in surrounding fire situation.

Extinguishing Media: Water, dry chemical, carbon dioxide, BCF and foam.

Hazards from combustion products: With heat, product burns/oxidises to form carbon, carbon monoxide and or carbon dioxide, and smoke.

Special protective precautions and equipment for fire fighters: Standard fire-fighting precautions applicable.

Hazchem code: None allocated

Section 6: Accidental Release Measures

Spills: Wet sweep, vacuum or pump into containers. Wash area with water. Notify any relevant waste or environmental authority.

Section 7: Handling And Storage

Handling: Material can ferment if excessive moisture contamination is allowed. Fermentation can yield carbon dioxide with possible traces of ethanol or volatile fatty acids (e.g. acetic, propionic, lactic, or butyric) and if exposed to a spark or flame may result in an explosion. These conditions should be avoided. If maintenance of tank requires entry by personnel, confined space precautions should be complied with. Insufficient oxygen may be present in vessels containing the product due to the generation of carbon monoxide during fermentation.

Storage: This product should be stored in its factory packaging in a dry area. Liquid Sugar in bulk should be stored in a vented tank designed to contain a material with a specific gravity of 1.3 or greater. Localised microbiological deterioration may start in areas where the liquid becomes diluted. Storage above 40°C can lead to spontaneous decomposition.

Section 8: Exposure Controls / Personal Protection

**Engineering Controls:** General room ventilation should be adequate, but local mechanical ventilation may be required if liquid mists are generated, particularly in confined spaces. Work areas should be cleaned regularly by wet sweeping or vacuuming.

**Personal Protection:** If engineering controls and work practices are not effective in controlling exposure, then personal protective equipment may be required.

**Skin Protection:** Direct skin contact should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves (PVC coated fabric or equivalent AS 2161). Work clothes should be washed regularly.

**Eye Protection:** Ventilated non-fogging goggles (splash resistant AS/NZS 1336) should be worn if liquid mist is generated.

**Respiratory Protection:** An approved particulate respirator conforming to Australian Standards AS/NZS 1715 and AS/NZS 1716 should be worn when working in liquid mists or dusts. Respirators should be correctly fitted, maintained in good condition, and kept in clean storage when not in use. Replaceable filters and cartridges should be replaced regularly in accordance with the manufacturers' guidelines and Australian Standards AS/NZS 1715 and AS/NZS 1716. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly, and kept in clean storage when not in use.

### Section 9: Physical And Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Colourless to pale yellow liquid</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>Faint caramel odour</td>
</tr>
<tr>
<td><strong>pH, at stated concentration</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Boiling Point/range</strong></td>
<td>(°C) &gt;105°C</td>
</tr>
<tr>
<td><strong>Freezing/Melting Point</strong></td>
<td>(°C) Not applicable</td>
</tr>
<tr>
<td><strong>Solubility in water</strong></td>
<td>Totally miscible</td>
</tr>
<tr>
<td><strong>Solubility (Other)</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>(H2O = 1) 1.33</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Flammability Limits</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Flash Point : Not applicable
Autoignition temperature : 500°C after evaporation of water

**Section 10: Stability And Reactivity**

**Chemical Stability**: Stable

**Incompatible Materials**: Incompatible with oxidising agents (eg. peroxides).

**Conditions to avoid**: None

**Hazardous Decomposition products**: None

**Hazardous Polymerisation**: None

**Section 11: Toxicological Information**

**Toxicity Data**: non-toxic – a foodstuff

**Sucrose**: LD50 (Ingestion): 29,700 mg/kg (rat)

**Health Effects**

*Acute (short term).*

**Swallowed**: No health effects under normal conditions of industrial use, but ingestion may destabilise people with diabetes.

**Eye**: Irritating to the eyes and may cause watering and redness.

**Skin**: Skin contact may result in mild skin irritation.

**Inhaled**: Not applicable unless aerosolised into liquid mists which may cause irritation to nose and throat.

**Chronic**: Repeated skin exposure to Liquid Sugar may result in skin irritation and if persistent, dermatitis which may become infected.

**Section 12: Ecological Information**

**Ecotoxicity**: Non-toxic to aquatic and terrestrial organisms.

**Persistence and Degradability**: Product is persistent and would have a low degradability.

**Mobility**: A low mobility would be expected in a landfill situation.
Section 13: Disposal Considerations

Liquid Sugar can be treated as a common waste for disposal or dumped into a landfill site in accordance with relevant authority guidelines. Note BOD load of sugar solutions in waste water streams. Personal precautions should be observed (see Section 8 above).

Section 14: Transport Information

Transport Requirements: No special transport requirements are necessary.
UN number: None allocated
Class: None allocated
Subsidiary Risk 1: None allocated
Packaging Group: None allocated
Hazchem code: None allocated
DG Class: None allocated
EPG: None
Incompatibilities: None
Proper Shipping Name: None allocated
Marine Pollutant: No

Section 15: Regulatory Information

Poisons Schedule: None scheduled

Section 16: Other Information

References: Not available.
Other Special Considerations: Not available.

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