1. IDENTIFICATION

GHS Product Identifier
LIQUID SUGAR

Product Code

Company Name
Sugar Australia Pty Limited (ABN 82 081 245 169)

Address
265 Whitehall St Yarraville
VIC 3013 Australia

Telephone/Fax Number
Tel: +61 3 9283 4558
Fax: +61 3 9689 4085

(24 hour a day available)
Emergency Phone Number: Poisons Information Centre 13 11 26

Recommended use of the chemical and restrictions on use
As a sweetener or ingredient in food processing and food preparation.

Other Names

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Code</th>
</tr>
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<tbody>
<tr>
<td>SUGAR SYRUP</td>
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<tr>
<td>SUCROSE SYRUP</td>
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</table>

Other Information
This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with the Code and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission - NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization. The Supplier will issue a new MSDS when there is a change in ASCC standards, guidelines, or regulations and/or a material change in product specifications.
2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</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>
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</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation
Not considered a potential route of exposure. However, if inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion
Unlikely to cause adverse effects. If ingested in large amounts and symptoms develop seek medical attention.

Skin
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities
Eyewash and normal washroom facilities.

Advice to Doctor
Treat symptomatically. People with diabetes may need stabilisation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water, dry chemical, carbon dioxide and foam.
Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Specific Hazards Arising From The Chemical
This product will burn if exposed to fire. Heating can cause expansion or decomposition leading to violent rupture of containers.

Decomposition Temperature
Not available

Precautions in connection with Fire
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe 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. Fermentation may also occur in dilute surface layers formed by condensation from the headspace above the liquid. These conditions should be avoided. If maintenance of a storage 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 gases during fermentation.

Avoid exposure. Use only in a well ventilated area. Keep containers tightly closed. Prevent the build up of dusts, mists or vapours in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for safe storage, including any incompatibilities
This product should be stored in its factory packaging in a dry area. This product in bulk should be stored in a vented tank designed to contain a material with a specific gravity of 1.34 or greater. Localised microbiological deterioration may start in areas where the liquid becomes diluted.

Other Information
For further information refer to Sugar Australia's "Liquid Sugar Storage and Handling in Bulk".
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Limit Values
No biological limits allocated.

Appropriate Engineering Controls
Use with good general ventilation.

Respiratory Protection
Generally not required.
Industrial applications: If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Not required under normal conditions of use. However, avoid eye contact.
Industrial Applications: Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Not required under normal conditions of use.
Industrial Applications: Wear gloves of impervious material (such as PVC coated fabric). Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.
Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection
Industrial applications: Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Liquid

Appearance
Liquid
**Colour**
Colourless to pale yellow

**Odour**
Faint caramel odour

**Decomposition Temperature**
Not available

**Melting Point**
Not applicable

**Boiling Point**
>105°C

**Solubility in Water**
Totally miscible

**Specific Gravity**
1.33-1.34

**pH**
6.0-8.5 (at time of manufacture)

**Vapour Pressure**
Not available

**Vapour Density (Air=1)**
Not available

**Evaporation Rate**
Not available

**Odour Threshold**
Not available

**Viscosity**
Not available

**Partition Coefficient: n-octanol/water**
Not available

**Flash Point**
Not available

**Flammability**
Combustible

**Auto-Ignition Temperature**
500°C (after evaporation of water)
Flammable Limits - Lower
Not applicable

Flammable Limits - Upper
Not applicable

10. STABILITY AND REACTIVITY

Reactivity
Reacts with incompatible materials.

Chemical Stability
Stable under normal conditions of storage and handling.

Conditions to Avoid
Heat, open flames and other sources of ignition.

Incompatible materials
Incompatible with oxidising agents (eg. peroxides).

Hazardous Decomposition Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen. Ethanol or volatile fatty acids (e.g. acetic, propionic, lactic, or butyric) if fermentation occurs.

Hazardous Polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity - Oral
Non-toxic - a foodstuff
Sucrose: LD50 (rat): 29,700 mg/kg

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

Inhalation
No health effects under normal conditions of industrial use but when aerolised into liquid mists may cause irritation to nose and throat.

Skin
May be irritating to skin. The symptoms may include redness, itching and swelling. Repeated skin exposure to this product may result in skin irritation and if persistent, dermatitis which may become infected.

Eye
May be irritating to eyes. The symptoms may include redness, itching and tearing.
Respiratory sensitisation
Not expected to be a respiratory sensitiser.

Skin Sensitisation
Not expected to be a skin sensitiser.

Germ cell mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Not considered to be a carcinogenic hazard.

Reproductive Toxicity
Not considered to be toxic to reproduction.

STOT-single exposure
Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Non-toxic to aquatic and terrestrial organisms. Sucrose is an oxygen depleting substance in aquatic environments.

Persistence and degradability
Not available

Mobility
Not available

Bioaccumulative Potential
Not available

Environmental Protection
Prevent this material entering waterways, drains and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal considerations
Product can be treated as a common waste for disposal to an organic recycler or into a landfill site in accordance with relevant Authority guidelines. Note Biochemical Oxygen Demand load of sugar solutions in waste water streams.
Return product to supplier for reuse / recycling if possible. Consult supplier for recycling options. Recycle containers if possible, or dispose of in an authorised landfill. Transportation of wet sugar waste may require
Waste Transport Certification. The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

14. TRANSPORT INFORMATION

Transport Information
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

U.N. Number
None Allocated

UN proper shipping name
None Allocated

Transport hazard class(es)
None Allocated

IMDG Marine pollutant
No

15. REGULATORY INFORMATION

Regulatory information
Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule
Not Scheduled

Australia (AICS)
All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS
SDS Reviewed: January 2015
Supersedes: February 2010

References
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Workplace exposure standards for airborne contaminants, Safe work Australia. American Conference of Industrial Hygienists (ACGIH). Globally Harmonised System of classification and labelling of chemicals.

Contact Person/Point
Emergency Contact Number: Poisons Information Centre 13 11 26
For further information on this product, please contact the following:
Sugar Australia Pty Limited
ABN 82 081 245 169
265 Whitehall St Yarraville VIC 3013 Australia
Telephone: 61 3 9283 4558
Facsimile: 61 3 9689 4085

Other Information
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