

 <p>CHEMLABS Quality Our Forte</p>	<p>LEONID CHEMICALS PVT. LTD., BANGALORE</p> <p>An ISO-9001:2008 Certified Company</p> <p>Quality Assurance Department</p>	<p>(CODE) DOCUMENT : WI (CODE) SECTION : WI/SM (DATE) : 01.04.2011</p>	 <p>Issue : 02 Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS): SUCROSE</p>			<p>1 Page of 1</p>

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS name:

Sucrose

Cat Number:

S096

Synonyms :

α -D-Glucopyranosyl β -D-fructofuranoside, α -D-Glc-(1 \rightarrow 2)- β -D-Fru, D(+)-Saccharose Sugar, β -D-Fructofuranosyl- α -D-glucopyranoside

Company Information

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SECTION 2- COMPOSITION, INFORMATION ON INGREDIENTS

Formula : C₁₂H₂₂O₁₁

% : \geq 99.5%

Molecular Weight : 342.3 g/mol

CAS-No.: 57-50-1

SECTION 3- HAZARDS IDENTIFICATION

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Classification of the substance or mixture

Not a dangerous substance according to GHS.

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

Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

Other hazards - none

SECTION 4- FIRST AID MEASURES

Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Indication of immediate medical attention and special treatment needed

no data available

SECTION 5- FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

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no data available

SECTION 6 -ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Specific end uses
no data available

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Control parameters
Components with workplace control parameters

Exposure controls
Appropriate engineering controls
General industrial hygiene practice.
Personal protective equipment

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Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards

such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected

according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired,

use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- a) Appearance Form: crystalline, Colour: white
- b) Odour: no data available
- c) Odour Threshold: no data available
- d) pH: 5.5 - 7at 342 g/L at 25 °C
- e) Melting/freezing point Melting point/range: 185 - 187 °C
- f) Initial boiling point and boiling range: no data available
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) Flammability (solid, gas) : no data available
- j) Upper/lower flammability or explosive limits : no data available
- k) Vapour pressure: no data available
- l) Vapour density: no data available
- m) Relative density: no data available

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- n) Water solubility 342 g/L at 20°C: completely soluble
 - o) Partition coefficient: noctanol/water: no data available
 - p) Autoignition temperature: no data available
 - q) Decomposition temperature : no data available
 - r) Viscosity: no data available
 - s) Explosive properties: no data available
 - t) Oxidizing properties: no data available
- Other safety information :no data available

SECTION 10 -STABILITY AND REACTIVITY

Reactivity

no data available

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - no data available

SECTION 11 -TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 29.700 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Cyanosis Diarrhoea

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

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Germ cell mutagenicity

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: WN6500000

SECTION12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

SECTION13. DISPOSAL CONSIDERATIONS

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Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

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: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

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

Special precautions for users

no data available

SECTION 15. REGULATORY INFORMATION

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

Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

Chemical Safety Assessment

no data available


SECTION 16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any

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special, indirect, incidental, consequential or exemplary damages, however arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.



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		(CODE) SECTION : S096	
Title: SPECIFICATION MANUAL - SUCROSE			Issue : 02 Rev.: 00 1 Page of 2

Specification manual - Sucrose

$C_{12}H_{22}O_{11}$

MW: 342.3

Product : Sucrose LR
Description : Colourless crystals or crystalline powder
Cat No : S096
Cas No : 57-50-1
Prepared Date : 07.03.2005
Approved Date : 07.03.2005

REVISION HISTORY			
Issue/Rev	Description of Change	Author	Effective Date
01/00	Initial Release	S. Paul Joshua	07.03.2005
02/00	Reviewed no changes	S. Paul Joshua	01.04.2011
Next Review Due :	02.04.2015		
To be reviewed by :	Head-QC/QA		

Sl. No.	Tests	Specification
		LR
1	Assay (HPLC)	≥99.5%
2	Chloride (Cl)	0.005%
3	Sulphate and sulphite (SO ₄)	0.005%
4	pH (1M in H ₂ O, 25°C)	5.5 – 7
5	Solubility (1M in H ₂ O, 25°C)	Complete, colourless

Approved By: S.Paul Joshua, Head Quality Control and Quality Assurance