



# Sucrose

## Safety Data Sheet

Version 1.1

Revision date 01/09/2012/JK-IA

### SECTION 1. Product and company identification

Chemical type	: Substance
Substance name	: Sucrose
CAS No.	: 57-50-1
Product code	: RC-099
Formula	: C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>
Synonyms	: (alpha-dextro-glucosido)-dextro-fructofuranoside / (alpha-D-glucosido)-beta-D-fructofuranoside / alpha-dextro-glucopyranoside, beta-dextro-fructofuranosyl / alpha-dextro-glucopyranosyl-beta-dextro-fructofuranoside / alpha-D-glucopyranosyl beta-D-fructofuranoside / beet sugar / beta-dextro-fructofuranoside-alpha-dextro-glucopyranosyl / beta-dextro-fructofuranosyl-alpha-dextro-glucopyranoside / beta-D-fructofuranoside, alpha-D-glucopyranosyl / cane sugar / confectioner's sugar / fructofuranoside, alpha-D-glucopyranosyl, beta-D / glucopyranoside, beta-D-fructofuranosyl, alpha-D / granulated sugar / rock candy / saccharum / sucrose / sucrose, dextro(+)- / sucrose, pure / sugar
Company identification	: G-Biosciences/ Geno Technology, Inc. 9800 Page Avenue St. Louis, MO 63312-1429, USA Tel.1-800-628-7730 <a href="http://www.GBiosciences.com">http://www.GBiosciences.com</a>
Emergency number	: Chemtrec <b>1-800-424-9300</b> (USA/Canada), <b>+1-703-527-3887</b> (Intl)

### SECTION: 2. Hazards identification

#### 2.1. Emergency Overview

Physical state	: Solid
Appearance	: Crystalline solid. Powder
Colour	: White
Odour	: Odourless

#### Sucrose(57-50-1)

#### 2.2. OSHA Regulatory Status

No additional information available

#### 2.3. Potential health effects

Symptoms/injuries after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract.
Symptoms/injuries after skin contact	: Unlikely to cause harmful effects.
Symptoms/injuries after eye contact	: Unlikely to cause harmful effects.
Symptoms/injuries after ingestion	: Unlikely to cause harmful effects.

#### 2.4. Potential environmental effects

No additional information available

### SECTION: 3. Composition/information on ingredients

Name	CAS No.	%
Sucrose	57-50-1	100

#### 4.1. First aid procedures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	: Rinse with water. Take victim to a doctor if irritation persists. Rinse immediately with plenty of water for 20 minutes.
First-aid measures after eye contact	: Rinse with water. Take victim to an ophthalmologist if irritation persists. Rinse immediately with water for 20 minutes.
First-aid measures after ingestion	: Immediately after ingestion: give lots of water to drink. Call Poison Information Centre ( <a href="http://www.big.be/antigif.htm">www.big.be/antigif.htm</a> ). Consult a doctor/medical service if you feel unwell. If unwell: consult a doctor and show packaging and/or label and this card where possible.

#### 4.2. Note to physicians

No additional information available

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### SECTION: 5. Firefighting measures

#### 5.1. Flammable properties

- Fire hazard : DIRECT FIRE HAZARD. Literature reports direct fire hazard. In finely divided state: increased fire hazard. INDIRECT FIRE HAZARD. Heating increases the fire hazard. Reactions involving a fire hazard: see "Reactivity Hazard".
- Explosion hazard : DIRECT EXPLOSION HAZARD. Its dust is explosive with air. INDIRECT EXPLOSION HAZARD. Dust cloud can be ignited by a spark. Reactions with explosion hazards: see "Reactivity Hazard".
- Reactivity : Upon combustion CO and CO<sub>2</sub> are formed. Reacts with (strong) oxidizers: (increased) risk of fire/explosion. Reacts exothermically with (strong) acids: release of harmful gases/vapours (carbon monoxide - carbon dioxide).

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Alcohol-resistant foam. Polymer foam. ABC powder. Carbon dioxide.

#### 5.3. Protection for firefighters

- Firefighting instructions : No specific fire-fighting instructions required.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

### SECTION: 6. Accidental release measures

#### 6.1. Personal precautions

##### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.
- Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

No additional information available

#### 6.3. Methods for containment

- For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Provide equipment/receptacles with earthing. Powdered form: no compressed air for pumping over spills.

#### 6.4. Methods for clean up

- Methods for cleaning up : Stop dust cloud by humidifying. Scoop solid spill into closing containers. Powdered: do not use compressed air for pumping over spills. See "Material-handling" for suitable container materials. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

#### 6.5. Other information

No additional information available

#### 6.6. Spill or leak statements by type of chemical

No additional information available

### SECTION: 7. Handling and storage

#### 7.1. Handling

- Precautions for safe handling : Comply with the legal requirements. Thoroughly clean/dry the installation before use. Powdered form: no compressed air for pumping over. Avoid raising dust. Take precautions against electrostatic charges. Keep away from naked flames/heat. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

#### 7.2. Storage

- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. water/moisture.
- Storage area : Store in a dry area. Store at room temperature. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: paper. cardboard. wood. synthetic material.

### SECTION: 8. Exposure controls/personal protection

#### 8.1. Exposure guidelines

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ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

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### 8.2. Engineering controls

No additional information available

### 8.3. Personal protective equipment (PPE)

Materials for protective clothing : GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.

Hand protection : Gloves.

Eye protection : Safety glasses. In case of dust production: protective goggles.

Skin and body protection : Protective clothing.

Respiratory protection : Dust production: dust mask with filter type P1. Dust production: dust mask with filter type P3.

## SECTION: 9. Physical and chemical properties

Physical state : Solid

Appearance : Crystalline solid. Powder.

Molecular mass : 342.30 g/mol

Colour : White.

Odour : Odourless.

Odour threshold : No data available

pH : No data available

Melting point : > 160 °C

Solidification point : No data available

Boiling point : No data available

Flash point : No data available

Relative evaporation rate (butylacetate=1) : No data available

Flammability (solid, gas) : No data available

Explosive limits : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : 1.6

Density : 1587 kg/m<sup>3</sup>

Solubility : Soluble in water. Soluble in ethanol. Soluble in methanol. Soluble in glycerol. Soluble in pyridine.  
Water: 200 g/100ml  
Ethanol: 0.59 g/100ml

Log Pow : -3.70 (experimental)

Self ignition temperature : No data available

Decomposition temperature : 190 °C

Viscosity : No data available

Explosive properties : No data available

Oxidising properties : No data available

VOC content : 0 %

Other properties : Hygroscopic.

## SECTION: 10. Stability and reactivity

### 10.1. Chemical stability

Upon combustion CO and CO<sub>2</sub> are formed. Reacts with (strong) oxidizers: (increased) risk of fire/explosion. Reacts exothermically with (strong) acids: release of harmful gases/vapours (carbon monoxide - carbon dioxide).

Hygroscopic.

### 10.2. Conditions to avoid

No additional information available

### 10.3. Incompatible materials

No additional information available

### 10.4. Hazardous decomposition products

No additional information available

### 10.5. Possibility of hazardous reactions

No additional information available

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### SECTION: 11. Toxicological information

#### Information on toxicological effects

Acute toxicity : Not classified

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LD50 oral rat	29700 mg/kg
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Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

### SECTION: 12. Ecological information

#### 12.1 Ecotoxicity

Ecology - air : Not dangerous for the ozone layer (Council Regulation (EC) no 1005/2009).

#### 12.2. 12.2. Persistence and degradability

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Persistence and degradability	Readily biodegradable in water. test: 81 %, OECD 302B Zahn- Well.
Biochemical oxygen demand (BOD)	0.69 g O <sup>2</sup> /g substance
ThOD	1.12 g O <sup>2</sup> /g substance
BOD (% of ThOD)	61 % ThOD

#### 12.3. Bioaccumulation/Accumulation

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Log Pow	-3.70 (experimental)
Bioaccumulative potential	Bioaccumulation: not applicable.

#### 12.4. Mobility in environmental media

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION: 13. Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Remove to an authorized dump.

Additional information : LWCA (the Netherlands): KGA category 03.

### SECTION: 14. Transport information

#### 14.1. Basic shipping description

No additional information available

#### 14.2 Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : Rail and road transport: not subject to ADR-RID.

#### Overland transport

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION: 15. Regulatory information

#### 15.1. US Federal regulations

No additional information available

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION: 16. Other information

NFPA health hazard

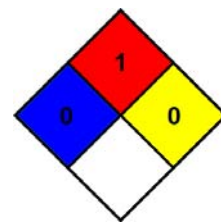
: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### HMIS III Rating

No additional information available

SDS US (ANSI) GBiosciences