

1. Product and Company Identification

Material name	SUCROSE
Version #	03
Revision date	09-08-2011
CAS #	57-50-1
Product Codes	J.T.Baker: 4005, 4072, 4074, 4097, 4842 Macron: 1397, 7723, 7724, 8360
Synonym(s)	alpha-D-glucopyranosyl-beta-D-fructofuranoside; sugar
Manufacturer	Avantor Performance Materials, Inc.
Address	3477 Corporate Parkway Suite #200 Center Valley, PA 18034 US
Customer Service	855-282-6867
24 Hour Emergency	908-859-2151
Chemtrec	800-424-9300

2. Hazards Identification

Emergency overview	Low hazard for usual industrial or commercial handling. Handle in accordance with good industrial hygiene and safety practice.
OSHA regulatory status	This material is not considered hazardous by the OSHA Hazard Communication Standard, OSHA 29 CFR 1910.1200.
Potential health effects	
Routes of exposure	Inhalation. Skin contact. Eye contact. Ingestion.
Eyes	Dust or powder may irritate eye tissue. If irritation should occur, it is expected to be transient.
Skin	Health injuries are not known or expected under normal use.
Inhalation	Health injuries are not known or expected under normal use.
Ingestion	Expected to be a low ingestion hazard.
Chronic effects	None known.
Potential environmental effects	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
SUCROSE	57-50-1	90 - 100

4. First Aid Measures

First aid procedures	
Eye contact	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
Ingestion	Seek medical advice.
Notes to physician	Treat symptomatically.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties Dust may form explosive mixture with air.

Extinguishing media

Suitable extinguishing media Water. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media None known.

Protection of firefighters

Protective equipment and precautions for firefighters Firefighters should wear full protective gear. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Specific methods In the event of fire, cool tanks with water spray. In the event of fire and/or explosion do not breathe fumes.

Hazardous combustion products Carbon monoxide and carbon dioxide.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Keep upwind. Ventilate the area. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods for containment ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Avoid dust formation.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Large Spills: Collect dust or particulates using a vacuum cleaner with a HEPA filter. Reduce airborne dust and prevent scattering by moistening with water.

Never return spills in original containers for re-use. Clean contaminated surface thoroughly. Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling Keep formation of airborne dusts to a minimum. Dust may form explosive mixture with air. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Wash thoroughly after handling. See Section 8 of the MSDS for Personal Protective Equipment.

Storage Keep container tightly closed. Store in a well-ventilated place.

8. Exposure Controls / Personal Protection

ACGIH

Material	Type	Value
SUCROSE (57-50-1)	TWA	10.0000 mg/m3

Occupational exposure limits

U.S. - OSHA

Material	Type	Value	Form
SUCROSE (57-50-1)	PEL	15.0000 mg/m3	Total dust.

Material	Type	Value	Form
		5.0000 mg/m ³	Respirable fraction.

Engineering controls	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.
Personal protective equipment	
Eye / face protection	Use tight fitting goggles if dust is generated.
Skin protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Respiratory protection	Wear respirator if there is dust formation.
General hygiene considerations	Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Crystalline.
Color	White.
Odor	Odorless.
Odor threshold	Not available.
Physical state	Solid.
Form	Crystals.
Melting point	366.8 °F (185.5 °C)
Freezing point	366.8 °F (185.5 °C)
Boiling point	Not applicable.
Flash point	Not available.
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor density	Not available.
Specific gravity	1.58
Relative density	Not available.
Solubility (water)	2000 g/l
Partition coefficient (n-octanol/water)	-3.7
Auto-ignition temperature	Not available.
Molecular weight	342.3 g/mol
Molecular formula	C ₁₂ H ₂₂ O ₁₁

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions.
Conditions to avoid	Heat, flames and sparks. Dust clouds may be explosive under certain conditions.
Incompatible materials	Strong oxidizing agents. Inorganic peroxides.
Hazardous decomposition products	Carbon monoxide. Carbon Dioxide.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product

SUCROSE (57-50-1)

Test Results

Acute Oral LD50 Rat: 29700 mg/kg

Sensitization

Not a skin sensitizer.

Acute effects

Low hazard for usual industrial or commercial handling.

Chronic effects

None known.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

SUCROSE (CAS 57-50-1)

A4 Not classifiable as a human carcinogen.

Skin corrosion/irritation

Not applicable.

Epidemiology

No epidemiological data is available for this product.

Mutagenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Neurological effects

None known.

Reproductive effects

Contains no ingredient listed as toxic to reproduction

Teratogenicity

No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Symptoms and target organs

None known.

12. Ecological Information

Ecotoxicity

This product has no known eco-toxicological effects.

Environmental effects

Ecological injuries are not known or expected under normal use. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Aquatic toxicity

This material is not expected to be harmful to aquatic life.

Persistence and degradability

Expected to be readily biodegradable.

Partition coefficient (n-octanol/water)

-3.7

13. Disposal Considerations

Disposal instructions

Dispose of contents/container in accordance with local/regional/national/international regulations. Incinerate the material under controlled conditions in an approved incinerator.

Contaminated packaging

Offer rinsed packaging material to local recycling facilities. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 311 hazardous chemical

No

Food and Drug Administration (FDA)

Total food additive
Direct food additive
GRAS food additive

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

SUCROSE (CAS 57-50-1)

Listed.

Saf-T-Data

Health: 0 - None
Flammability: 2 - Moderate
Reactivity: 0 - None
Contact: 1 - Slight
Lab Protective Equip: B - GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES
Storage Color Code: G - Green (General Storage)

16. Labeling Info

Label Hazard Warning

Low hazard for usual industrial or commercial handling. Handle in accordance with good industrial hygiene and safety practice.

Label Precautions

Keep away from heat, sparks and flame. Wash thoroughly after handling. Keep container closed.

Label First Aid

Immediately flush eyes with plenty of water for at least 15 minutes. Flush skin thoroughly with water. If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Get medical attention if irritation develops or persists. If ingestion of a large amount does occur, call a poison control center immediately.

17. Other Information

NFPA ratings

Health: 0
Flammability: 1
Instability: 0

Disclaimer

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Issue date

09-08-2011

This data sheet contains changes from the previous version in section(s):

Physical & Chemical Properties: Appearance