

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SUCROSE, REAGENT (ACS)
Catalog # AR2021
Version # 02
Revision date 04-Mar-2010
CAS # 57-50-1
Synonym(s) SUGAR * Beet sugar * Cane sugar
Manufacturer information **Alpha Resources, Inc**
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2. Hazards Identification

Emergency overview Harmful in contact with eyes. Exposure to powder or dusts may be irritating to eyes, nose and throat.

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Inhalation. Eye contact.

Eyes Contact may irritate or burn eyes. Eye contact may result in corneal injury. Do not get this material in contact with eyes.

Skin Health injuries are not known or expected under normal use.

Inhalation Inhalation of dusts may cause respiratory irritation. Do not breathe dust.

Ingestion Health injuries are not known or expected under normal use.

Target organs Eyes. Respiratory system.

Chronic effects Conjunctiva.

Signs and symptoms Corneal damage. Conjunctivitis.

Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Components	CAS #	Percent
SUCROSE	57-50-1	90 - 100
Composition comments		
US OSHA Table Z-1-A: Time Weighted Average (TWA): mg/m3		
SUCROSE	57-50-1	Total dust. MGM3 - 15
SUCROSE	57-50-1	Respirable fraction. MGM3 - 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Skin contact Rinse skin with water/shower. Get medical attention if irritation develops or persists.

Inhalation If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Notes to physician

Symptoms may be delayed.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties

Dust may form explosive mixture with air. The product is not flammable. Will burn if involved in a fire.

Extinguishing media**Suitable extinguishing media**

Water. Water spray. Foam. Dry powder. Carbon dioxide (CO₂).

Protection of firefighters**Protective equipment and precautions for firefighters**

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

Specific methods

In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Keep upwind. Keep out of low areas. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods for containment

Use water spray to reduce vapors or divert vapor cloud drift. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Following product recovery, flush area with water.

7. Handling and Storage

Handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust from this material. Do not get this material in contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Wash thoroughly after handling. Handle and open container with care.

Storage

Store in a well-ventilated place. Keep container tightly closed. Guard against dust accumulation of this material. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Occupational exposure limits**ACGIH****Material****CAS #****Type****Value****Form**

SUCROSE

57-50-1

TWA

10 mg/m³

U.S. - OSHA**Material****CAS #****Type****Value****Form**

SUCROSE

57-50-1

PEL

5 mg/m³

Respirable fraction.

15 mg/m³

Total dust.

TWA

5 mg/m³

Respirable fraction.

15 mg/m³

Total dust.

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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection

Wear respirator with dust filter.

Hand protection

Not normally needed.

Eye / face protection

Do not get this material in contact with eyes. Wear dust goggles.

Skin protection

No special protective equipment required.

General hygiene considerations

Do not breathe dust. Do not get this material in contact with eyes. Handle in accordance with good industrial hygiene and safety practice.

General

Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical & Chemical Properties

Appearance

Crystalline.

Color

White.

Odor

Odorless.

Odor threshold

Not available.

Physical state

Solid.

Form

Powder. Crystalline.

pH

Not available.

Melting point

366.8 °F (185.5 °C)

Freezing point

366.8 °F (185.5 °C)

Boiling point

Not available.

Flash point

Not available.

Evaporation rate

Not available.

Flammability

Not available.

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Specific gravity

1.587

Relative density

1.5805 g/cm³

Solubility (water)

2000 g/l

Partition coefficient (n-octanol/water)

-3.7

Auto-ignition temperature

Not available.

Decomposition temperature

320 - 365 °F (160 - 185 °C)

VOC

0 %

Percent volatile

0 %

Molecular weight

342.3000 g/mol

Molecular formula

C₁₂H₂₂O₁₁

10. Chemical Stability & Reactivity Information

Chemical stability

Stable at normal conditions.

Conditions to avoid

Avoid dust formation.

Incompatible materials

Acids. Oxidizing agents.

Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects

Acute Oral: LD 50

SUCROSE 57-50-1 Rat 29700 mg/kg

Toxicology data for the preparation

Acute LD50: 29700 mg/kg, Rat, Oral

Local effects

Contact may irritate or burn eyes. Inhalation of dusts may cause respiratory irritation.

Chronic effects

Hazardous by OSHA criteria.

Carcinogenicity

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

US ACGIH Threshold Limit Values: A4 carcinogen

SUCROSE 57-50-1 A4 Not classifiable as a human carcinogen.

12. Ecological Information

Ecotoxicity

This product has no known eco-toxicological effects.

Persistence and degradability

Not available.

Partition coefficient

-3.7

13. Disposal Considerations

Disposal instructions

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

Waste from residues / unused products

Not applicable.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

This product is 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 - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

Yes

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 New and Existing Chemicals (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 57-50-1 Listed.

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 1*
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date

04-Mar-2010

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

This document has undergone significant changes and should be reviewed in its entirety.