MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

TRADE NAME: Sucrose

Catalog No.: 
Chemical Identity, Common names: Sucrose, Cane Sugar, Beet Sugar, Sugar, Beta-d-Fructofuranoside-Alpha-d-glucopyranoside. 
Formula: C_{12}H_{22}O_{11} 
MW: 342.30

DATE PREPARED OR REVISED: 
September 5, 1989

II. HAZARDOUS INGREDIENTS

This product contains the following toxic chemical subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>CHEMICAL NAMES</th>
<th>CAS NUMBERS</th>
<th>PERCENT</th>
<th>EXPOSURE LIMITS IN AIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sucrose</td>
<td>57-50-1</td>
<td>100%</td>
<td>ACGIH TLV: 10mg/m^3 (TWA)</td>
</tr>
</tbody>
</table>

*Exposure limit for total dust 
TWA=8-Hour Time Weighted Average 
† Oral rat LD50=29,700 mg/kg. (RTECS)

III. PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: N/A
VAPOR PRESSURE: N/A
VAPOR DENSITY(AIR = 1): N/A
SOLUBILITY IN WATER: 2 g/ml
APPEARANCE AND COLOR: White, odorless crystals

SPECIFIC GRAVITY(H_2O = 1): 1.587
MELTING POINT: 160°-186°C (320°-367°F)
EVAPORATION RATE (BUTYL ACETATE = 1): N/A

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: unknown (combustible) 
(METHOD USED): N/A
EXTINGUISHING MEDIA: Water, dry chemical, carbon dioxide.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear full protective clothing and self-contained breathing apparatus with full facepiece.
UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated to decomposition, emits acrid smoke and fumes.

FLAMMABLE LIMITS: N/A

V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE (for each potential route of exposure):
INHALED: May irritate upper respiratory passages.
CONTACT WITH SKIN OR EYES: No adverse effects expected but dust may cause mechanical irritation.
ABSORBED THROUGH SKIN: No adverse effects expected, not reported to be absorbed through the skin.
SWALLOWED: Extremely large oral dosages may produce gastrointestinal disturbances.
HEALTH EFFECTS OR RISKS FROM EXPOSURE

ACUTE: Listed in "Dangerous Properties of Industrial Materials" Sax, N.I., (5th ed) as a non-toxic nuisance dust.

CHRONIC: No information found.

FIRST AID: EMERGENCY PROCEDURES

EYE CONTACT: Wash with large volumes of water for at least 15 minutes, lifting the upper and lower lids occasionally. Get medical attention.

SKIN CONTACT: Wash with soap and water.

INHALED: Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

SWALLOWED: Should pass through the body normally. If large amounts were swallowed, give water and get medical attention. Never give anything by mouth to an unconscious or convulsing person.

SUSPECTED CANCER AGENT

_X__NO: THIS PRODUCT'S INGREDIENTS ARE NOT FOUND IN THE LISTS BELOW.

YES: ______FEDERAL OSHA ______NTP ______IARC

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

No specific data found.

VI. REACTIVITY DATA

STABLE: X

UNSTABLE: ______

CONDITIONS TO AVOID: Temperatures above 160° C.

INCOMPATIBILITY(Materials to avoid): Oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition.

HAZARDOUS POLYMERIZATION MAY OCCUR: ______ WILL NOT OCCUR: X

CONDITIONS TO AVOID: N/A

VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL RESPONSE PROCEDURES: Remove all sources of ignition. Shovel or sweep into appropriate containers, or wash down the drain with water. Wear protective clothing and appropriate respiratory protection if dust may be a problem.

PREPARING WASTES FOR DISPOSAL: Comply with all applicable federal, state, and local regulations on spill reporting, waste handling, and waste disposal.

VIII. SPECIAL HANDLING INFORMATION

VENTILATION AND ENGINEERING CONTROLS: In general, dilution ventilation is a satisfactory control for sucrose.

RESPIRATORY CONTROLS: Wear a NIOSH-approved respirator appropriate for the airborne dust concentration at the point of use.

EYE PROTECTION: Safety glasses.

GLOVES: Not normally needed.

OTHER CLOTHING AND EQUIPMENT: Wear clean body-covering clothing.

WORK PRACTICES, HYGIENIC PRACTICES: Use good laboratory practices. Wash hands after using and before eating. Do not eat, drink, or smoke in the work area.

OTHER HANDLING AND STORAGE REQUIREMENTS: Keep in a tightly closed container to protect product quality. Store in a cool, dry, ventilated area away from incompatible materials, and sources of heat or ignition.

PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Protective clothing and appropriate respiratory protection should be worn.

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