

MATERIAL SAFETY DATA SHEET July 1, 1988

SECTION I NAME

Product	D-(-)-FRUCTOSE	CHEMTRAC	800-424-9300	Health	0
Chemical Synonyms	d-Levulose		1-800-716-226-6177	File	0
Formula	C ₆ H ₁₂ O ₆		1-800-716-334-4222	Reactivity	1
Unit(s) Size	25 g., 100 g., 500 g.				
C.A.S. No.	57-48-7				

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	D (-) Fructose	%	100%	TLV Units	None established.
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Low hazard for usual laboratory handling; non-toxic.

SECTION III PHYSICAL DATA

Melting Point (°F)	219°F (104°C) dec.	Specific Gravity (M.D. = 1)	1.60 (20/4°C)
Boiling Point (°F)	Decomposes.	Percent Volatile by Volume (%)	Non-volatile (NA)
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate	Non-volatile (NA)
Vapor Density (Air = 1)	6.2		
Solubility in Water	Freely soluble.		
Appearance and Odor	White crystalline powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-Flammable (NA)	Flammable Limits in Air % by Volume	Lower: NA Upper: NA
Extinguisher Media	Water spray; dry chemical (ABC); carbon dioxide (CO ₂).		

SPECIAL-FIREFIGHTING PROCEDURES

Evacuate personnel to an area of upwind direction and remove unneeded materials; keep fire-exposed containers cool with water spray, and provide fire fighters with self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials. This material in powder form, is capable of creating a dust explosion.

D.O.T. NON-REGULATED.



FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA 20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value
None established. TWA: 10 mg/m³ total dust, or 5 mg/m³ respirable dust. (ACGIH 1983-84).

Effects of Overexposure
Specific data is not available. This compound is considered to be of low hazard by ingestion or by contact. Exercise appropriate procedure to minimize potential hazards. EYES: No specific hazard is known. However, any material that contacts the eye may be irritating.

Emergency and First Aid Procedures

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EYE CONTACT: Flush thoroughly with water. If irritation develops or persists get medical attention.
SKIN: Flush with water.
INHALATION: Remove to fresh air. If symptoms of illness develop, get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Excessive temperature or heat.
	Stable		
Incompatibility (Materials to avoid)			Strong oxidizers.

Hazardous Decomposition Products

Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

Hazardous Polymerization

Will Not Occur

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled
Small spills: sweep up and place in a suitable container. Dissolve in water and flush to sewer with copious amounts of water.

Waste Disposal Method

Uncontaminated material may be disposed of in a sanitary landfill or dispose of in an approved incinerator.

SECTION VIII SPECIAL PROTECTION INFORMATION

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

Respiration Protection	None required.	Special	Not
Ventilation	Local Exhaust Mechanical General	Eye Protection	Chemical safety glasses.
Protective Gloves	None needed.		

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken In Handling and Storing
Store in a cool, dry place away from strong oxidants. Wash thoroughly after handling.

Other Precautions

Read label on container before using.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.
Rev. No. No. 1 Date 11/10/87 Approved Wanda L. Coen Chemical Safety Coordinator

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