

MATERIAL SAFETY DATA SHEET

00098

SECTION I NAME

Product ZINC SULFATE, HEPTAHYDRATE
Chemical Synonyms Zinc Sulfate, Heptahydrate
Formula ZnSO₄·7H₂O
Unit(s) Size 100, 500 grams, 2.5 Kg.
C.A.S. No. 7446-20-0

CHEMTRAC
 800-424-9300
 Day 716-326-6177
 Night 716-334-4222

HAZARD RATING
 HEALTH: 1
 FIRE: 0
 REACTIVITY: 1

NFPA
 HEALTH: 1
 FLAMM: 0
 REACT: 1

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	%	TLV Units
Zinc Sulfate, Heptahydrate	100%	None established

SECTION III PHYSICAL DATA

AVOID BREATHING DUST. USE WITH ADEQUATE VENTILATION.

AVOID CONTACT WITH EYES, SKIN, OR CLOTHING.

Melting Point (°F)	212°F (100°C)	Specific Gravity (M₀ = 1)	1.957 (25/4°C)
Boiling Point (°F)	dec. above 500°C	Percent Volatile by Volume (%)	Non-volatile (NA)
Vapor Pressure (mm Hg)	Negligible as solid	Evaporation Rate	= 1) Non-volatile (NA)
Vapor Density (Air = 1)	9.95		
Solubility in Water	166 grams per 100 ml H ₂ O at 20°C.		
Appearance and Odor	White (colorless) crystals, granules, powder; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA)	Flammable Limits in Air % by Volume	Lower: Upper:
Extinguisher Media	Use any media suitable for extinguishing supporting fire.		

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products.

D.O.T. OTHER REGULATED MATERIAL-E



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. (ACGIH 1983-84).
 Toxicity: Oral (Rat) LD50: 2200 mg/kg.

Effects of Overexposure

Prompt vomiting (usually within five to ten minutes) after swallowing. Pain in mouth, esophagus and stomach. Diarrhea with "colicky" abdominal pain.
EYES: May irritate eyes.
SKIN: Zinc sulfate in an open skin lesion or cut can cause an ulcer.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink. Call physician immediately.
SKIN: Flush with water, then wash with soap and water.
EYES: Immediately flush thoroughly with water for 15 minutes. Get immediate medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Deliquescent. Excessive heat and moisture.
Incompatibility (Materials to avoid)	None known.		

Hazardous Decomposition Products

Thermal decomposition or burning may produce oxides of sulfur (SO₂).

Hazardous Polymerization

Will Not Occur

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Small amounts: Dissolve in water and flush to sewer with copious amounts of water. Wash spill area with soap and water.

Waste Disposal Method

Large amounts: Dispose of in an approved chemical landfill or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail, use NIOSH-approved dust mask.	Local Exhaust Ventilation (Mechanical/General)	None needed
Protective Gloves	Rubber	Eye Protection	Chemical safety glasses.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing

Store in a cool, dry place. Wash thoroughly after handling. Keep container tightly closed when not in use.

Other Precautions

Read label on container before using.
 Efflorescent in dry air.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. 1 Date 11/2/87 Approved [Signature] Chemical Safety Coordinator

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