

**GELEST, INC.**

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME ON LABEL: **HOLMIUM TETRAMETHYLHEPTANEDIONATE - AKH362**

CHEMICAL NAME: HOLMIUM 2,2,6,6-TETRAMETHYLHEPTANEDIONATE

SYNONYMS: HOLMIUM TMHD, HOLMIUM DPM

CHEMICAL FAMILY: RARE EARTH COMPOUND

FORMULA: C<sub>33</sub>H<sub>57</sub>O<sub>6</sub>Hm

HMIS CODES HEALTH: 2 FLAMMABILITY: 1 REACTIVITY: 0

**INGREDIENTS**

IDENTITY	CAS NO.	%	TLV
HOLMIUM 2,2,6,6-TETRAMETHYLHEPTANEDIONATE	15522-73-3	>95	not established

**PHYSICAL DATA**

Boiling Point: not determined  
Specific Gravity: not determined  
Vapor Density: NA  
% volatiles: <3  
Molecular Weight: 714.75  
Appearance & Color: White to off-white crystals, characteristic odor

Melting Point: 178-181°C  
Vapor Pressure, 25°: ,5mm  
Solubility in water: insoluble  
Evaporation rate: NA  
Other: N/A

**FIRE & EXPLOSION DATA**

Flash Point, COC: NA Autoignition Temp.: not determined  
Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Water spray, foam, carbon dioxide, dry chemical.

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

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## ENVIRONMENTAL INFORMATION

Spill response: Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Dispose of as solid waste. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation of dust or particulates may irritate the respiratory tract.

Ingestion: May cause delayed blood clotting leading to hemorrhages. Lanthanum compounds have caused liver damage in laboratory animals.

Oral Toxicity: not determined

Chronic Toxicity: not determined

### SUGGESTED FIRST AID

**EYES:** In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

**SKIN:** Flush with water, then wash with soap and water.

**INHALATION:** Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

**INGESTION:** Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

## REACTIVITY DATA

Stability: Stable

Conditions to avoid: Material decomposes slowly in contact with air by reaction with water and carbon dioxide.

Hazardous decomposition products: Organic acid vapors and holmium oxide fumes.

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## SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved dust and mist respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

## OTHER PRECAUTIONS

For research use only.

Storage and Handling: Store in sealed containers.

## TRANSPORTATION

DOT SHIPPING NAME: CHEMICALS, NOI

DOT HAZARD CLASS: None required

DOT LABEL: None required

DOT ID No: None required

Prepared by safety and environmental affairs      ISSUE DATE AKH362: 11/18/02  
SUPERSEDES: 11/2/95

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