

ZINC SULFATE
MATERIAL SAFETY DATA SHEET

INTEGRA Chemical Company
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)

MSDS Number: Z600
Revision Date: 16-Apr-08
Revision No.: 004

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PRODUCT IDENTIFICATION

Product Name: ZINC SULFATE
Synonyms: Sulfuric acid, zinc salt
Chemical Formula: ZnSO4 7H2O
Formula Weight: 287.57
Chemical Family: Inorganic zinc salt
Integra Product Numbers: Z600.10; Z600.31; Z600.50

HAZARD OVERVIEW

HMIS Rating: 1-0-1-E **NFPA Rating:** NE
Warning Label: Caution.
May cause irritation. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing.

COMPONENTS

Component	CAS #	%
Zinc sulfate, heptahydrate	07446-20-0	100

PHYSICAL DATA

Boiling Point: 500 °C	Specific Gravity: 1.97 Water=1
Melting Point: 100 °C	Evaporation Rate: NA
Vapor Pressure: NA	Vapor Density: NA Air = 1

Solubility: Appreciably soluble (>10%) in water.
Appearance and Odor: Colorless to white crystals or powder. Odorless.

FIRE AND EXPLOSION DATA

Flash Point: NA **Test Method:**
Auto-ignition Temperature: NA
Flammable Limits (% by volume in air): Upper: NA Lower: NA
Fire Extinguishing Media: Material is not flammable. Use extinguishing media suitable to surrounding materials.
Special Firefighting Procedures: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Unusual Fire and Explosion Hazards: None identified

HEALTH HAZARD INFORMATION

Effects of Overexposure

Skin Contact: Contact may cause irritation or burns.
Eye Contact: May irritate or burn the eyes.
Ingestion: May be harmful if swallowed. May cause burns to the mouth, throat and gastrointestinal tract.
Inhalation: Inhalation may irritate the nose, throat and upper respiratory tract.
Chronic Effects of Overexposure: Repeated skin contact can cause swelling or other skin eruptions.

Exposure Limits:	OSHA PEL:	TWA	STEL	Ceiling
Zinc sulfate, heptahydrate		NE	NE	NE
Zinc sulfate, heptahydrate	ACGIH TLV:	TWA	STEL	Ceiling
		NE	NE	NE

Toxicity Data: Zinc sulfate, heptahydrate LD50 (oral, rat) 2150 mg/kg

Medical Conditions Generally Aggravated by Exposure: Skin and respiratory conditions.

Target Organs: None Identified

Reproductive Effects: None Identified

Carcinogenicity: None Identified

Component	NTP Listing	IARC Listing	OSHA Regulated
Zinc sulfate, heptahydrate	No listing	No listing	<input type="checkbox"/>

EMERGENCY FIRST AID PROCEDURES

Skin Contact: Flush skin with plenty of water. Seek medical attention.
Eye Contact: Flush with water for at least 15 minutes. Seek immediate medical attention.
Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.
Ingestion: Do not induce vomiting. If victim is conscious, give water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Additional First Aid and Treatment Notes: No information available

REACTIVITY DATA

Stability: Stable **Hazardous Polymerization:** Will Not Occur

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REACTIVITY DATA

Incompatibles: Incompatible with strong acids. Water.

Decomposition Products: Oxides of sulfur. Zinc oxide.

Conditions to Avoid: Heat and moisture.

SPILL AND DISPOSAL PROCEDURES

Spill and Leak Procedures: Prevent spread of spill. Sweep or scoop into disposal container. Flush residues with water. Wear suitable protective equipment.

Disposal Procedures: Dispose in accordance with all Local, State and Federal regulations.

PROTECTIVE EQUIPMENT

Ventilation: Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.

Respiratory Protection: None needed unless use generates annoying or irritating dusts, mists or vapors. Use a dust/mist respirator mask if necessary.

Skin and Eye Protective Equipment: Safety goggles, protective clothing and gloves. Maintain an eyewash station and safety shower nearby.

STORAGE AND HANDLING PRECAUTIONS

Storage Area: GENERAL

Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Protect containers from physical damage. Hygroscopic material. Keep containers well closed.

TRANSPORTATION INFORMATION

Regulated Material domestic ground transportation (reference: CFR Title 49, Transportation)

Proper Shipping Name: _____ Hazard Class and Label: _____
UN or NA Identification number: _____ Subsidiary Risk and Label: _____
Packing Group: _____

Regulated Material via Air Transportation (reference: ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air)

Proper Shipping Name: _____ Hazard Class and Label: _____
UN Identification Number: _____ Subsidiary Risk and Label: _____
Packing Group: _____

Packing Instruction Max net qty per package

Passenger Aircraft: _____
Cargo Aircraft: _____

REGULATORY INFORMATION

Component	TSCA Inventory	CERCLA RQ	SARA EHS TPQ	SARA 313 Toxic Release	<i>de minimus</i>
Zinc sulfate, heptahydrate	<input checked="" type="checkbox"/>	lbs	<input type="checkbox"/>	lbs	<input type="checkbox"/>
<u>SARA Hazard Categories:</u>	<u>Acute</u>	<u>Chronic</u>	<u>Flammability</u>	<u>Pressure</u>	<u>Reactivity</u>
Zinc sulfate, heptahydrate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Clean Air Act Categories:</u>	<u>SOCMI</u>	<u>HAP</u>	<u>Volatile HAP</u>	<u>Organic HAP</u>	<u>Ozone Depleting</u>
Zinc sulfate, heptahydrate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MSDS Revision History:

- 002 - Changed header phone number
- 003 - Format revisions; updated header phone number
- 004 - Updated Header Information; Updated Product Identification

NE = Not established, NA = Not applicable or Not available

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***** END OF MSDS *****