Material Safety Data Sheet

I - Product Identification:

Product Name: Zinc Sulfate, USP
Code: 0702, 0102
CAS #: 7446-20-0 (Heptahydrate);
7446-19-7 (Monohydrate)
Empirical Formula: ZnSO$_4$.xH$_2$O
Chemical Name: Sulfuric acid, zinc salt (1:1), heptahydrate; Sulfuric acid, zinc salt (1:1) monohydrate.
Uses: Ophthalmic astringent. Zinc supplement.

II - Toxicological Information:

Irritancy: May cause irritation to the skin, eyes, mucous membranes and respiratory tract.
Adverse Effects: Harmful if swallowed. May be harmful if inhaled or absorbed through skin. May cause abdominal pain, dyspepsia, nausea, vomiting, diarrhea, gastric irritation, gastritis. Prolonged use may cause copper deficiency, sideroblastic anaemia, neutropenia, metal fume fever.

III - Physical Data:

Physical State: Liquid __ Solid _ X Gas__
Description: Colorless, transparent prisms, or small needles. May occur as a white granular, crystalline powder. Is odourless and is efflorescent in dry air. Its solutions are acid to litmus.
Solubility: Very soluble in water (heptahydrate); freely soluble in water (monohydrate); freely soluble in glycerin (heptahydrate); practically insoluble in alcohol (monohydrate); insoluble in alcohol (heptahydrate).

IV - Fire And Explosion Hazards:

Flammability: May be combustible at high temperature.
Flash Point: N/A
Extinguishing Media: Small fire: dry chemical, CO$_2$ or water spray. Large fire: dry chemical, CO$_2$, alcohol resistant foam or water spray. Do not get water inside containers.

V - Reactivity Data:

Stability: Stable.
Incompatibilities: Strong bases and oxidants.
Hazardous Decomp. Products: Toxic fumes of sulfur oxides, zinc oxides and other gases may occur.
Hazardous Polymerization: Will not occur.

VI - Preventative Measures:

Preventive Measures: Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

Personal Protective Equipment: Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHIMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Follow WHIMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Specific Engineering Controls: Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.
Spills & Leaks: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

Waste Disposal: Dispose of in accordance with federal / local laws and regulations.
Storage: Preserve in tight containers.
Shipping: N/A

VII - First Aid Measures:

Eyes: Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.
Skin: Wash with soap & water for 15 minutes. If irritation persists seek medical aid.
Ingestion: Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

NOTE: If victim is unconscious, never induce vomiting nor give liquids. Place victim in a stable side position and keep warm.

Ecological Data: N/A
Hazardous Ingredients: N/A
References: Available on request.

This is intended only as a guide to the appropriate precautionary handling of the product. We assume no responsibility and/or liability whatsoever for the use or misuse of this product.