



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Zinc sulfide

CHEMICAL NAME: Zinc sulfide

CHEMICAL FORMULA: ZnS

SECTION 1 – PHYSICAL/CHEMICAL CHARACTERISTICS

PHYSICAL STATE AND APPEARANCE: Solid. (Solid powder.)

ODOR: Not available.

TASTE: Not available.

MOLECULAR WEIGHT: 97.43 g/mole

COLOR: White to yellowish.

pH (1% soln/water): Not applicable.

BOILING POINT: Decomposes.

MELTING POINT: Sublimes.

CRITICAL TEMPERATURE: Not available.

SPECIFIC GRAVITY: 4.1 (Water = 1)

VAPOR PRESSURE: Not applicable.

VAPOR DENSITY: Not available.

VOLATILITY: Not available.

ODOR THRESHOLD: Not available.

WATER/OIL DIST. COEFF.: Not available.

IONICITY (in Water): Not available.

DISPERSION PROPERTIES: Not available.

SOLUBILITY: Insoluble in cold water, hot water.

SECTION 2 – FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY OF THE PRODUCT: May be combustible at high temperature.

AUTO-IGNITION TEMPERATURE: Not available.

FLASH POINTS: Not available.

FLAMMABLE LIMITS: Not available.

PRODUCTS OF COMBUSTION: Some metallic oxides.

FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES: Not available.

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

FIRE FIGHTING MEDIA AND INSTRUCTIONS: SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

SPECIAL REMARKS ON FIRE HAZARDS: Not available.

SPECIAL REMARKS ON EXPLOSION HAZARDS: Not available.

SECTION 3 – REACTIVITY DATA

STABILITY: The product is stable.

INSTABILITY TEMPERATURE: Not available.

CONDITIONS OF INSTABILITY: Not available.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES: Reactive with oxidizing agents, acids.

CORROSIVITY: Non-corrosive in presence of glass.

SPECIAL REMARKS ON REACTIVITY: Air sensitive. Reacts violently with iodine pentachloride.

SPECIAL REMARKS ON CORROSIVITY: Not available.

POLYMERIZATION: No

SECTION 4 – HEALTH HAZARD DATA

POTENTIAL ACUTE HEALTH EFFECTS: Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

POTENTIAL CHRONIC HEALTH EFFECTS:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 5 – FIRST AID PROCEDURES

EYE CONTACT: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

SKIN CONTACT: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

SERIOUS SKIN CONTACT: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention. Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

SERIOUS INHALATION: Not available.

INGESTION: Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

SERIOUS INGESTION: Not available.

SECTION 6 – SPECIAL HANDLING INFORMATION

PRECAUTIONS:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

STORAGE:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

SECTION 7 – TOXICOLOGICAL INFORMATION

ROUTES OF ENTRY: Dermal contact. Eye contact. Inhalation. Ingestion.

TOXICITY TO ANIMALS:

LD50: Not available. LC50: Not available.

CHRONIC EFFECTS ON HUMANS: Not available.

OTHER TOXIC EFFECTS ON HUMANS: Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

SPECIAL REMARKS ON TOXICITY TO ANIMALS: Not available.

SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS: Not available.

SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMANS: Material is irritating to mucous membranes and upper respiratory tract.