STANFORD ADVANCED MATERIALS
http://www.samaterials.com

Stanford Advanced Materials
We not only sell products, we provide satisfactions.
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Tel: (949) 407-8904 Fax: (949) 812-6690

Current Version: 2.0
Revision Date: Sep 5, 2012

Material Safety Data Sheet

Identity: Zinc fluoride Formula: ZnF2

SECTION I - GENERAL INFORMATION

Manufacturer: Stanford Advanced Materials (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION Form

Weight: 103.38

CAS #	OSHA PEL	ACGIH TLV	%
7783-49-5	2.5mg(F)/m^3	2.5mg(F)/m^3	0.0-100%

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 1500.0 ℃ (2732.0F)
Melting Point: 872.00 ℃ (1601.6F)
Evaporation Rate: N/A
Solubility in water: Soluble

Vapor Pressure (vs. air or mmHg): N/A
Vapor Density: N/A g/cm^3
Flash Point: N/A

Appearance and odor: Colorless to white powder or pieces, no odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: Non-Flammable *Explosive Limits:* LEL: N/A *UEL:* N/A

Extinguishing Media:
Use suitable extinguishing media for surrounding materials and type of fire.

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazards:
When heated to decomposition, Zinc fluoride may emit toxic fumes of fluorine and zinc.

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SECTION V - REACTIVITY DATA

Stability: Stable
Conditions to Avoid: None
Incompatibility: Strong oxidizing agents.
Hazardous Decomposition or Byproducts: Fumes of fluoride, hydrogen fluoride and zinc.
Hazardous Polymerization: Will not occur.
Conditions to avoid (Hazardous polymerization: None

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other? N

Signs and Symptoms of Overexposure:

Inhalation: May cause a sweet taste, throat dryness, coughing, weakness, generalized aches, chills, fever, nausea, ulcers of the upper respiratory tract, excessive salvation, vomiting, thirst, sweating, colic and diarrhea. Fibrosis may cause: sclerosis of the bones, calcification of ligaments, mottled teeth, osteosclerosis, ostemalacia, loss of weight, anorexia, anemia, wasting, cachia and dental defects.

Ingestion: May cause coughing, shortness of breath, sweating, nausea, vomiting, diarrhea, abdominal pain, cramp-like pain, a stiff spine, calcification of ligaments of the ribs and pelvis.

Skin: May cause redness, itching, and chemical burns.

Eye: May cause redness, itching, and watering and chemical burns.

Health Hazards (Acute and Chronic):

Inhalation:
Acute: Severe irritant and corrosive to the respiratory tract and mucous membrane. May cause brass chills, asthma attacks, excessive salivation, thirst, sweating, vomiting, colic, diarrhea and lung granulomas.
Chronic: May cause respiratory tract irritation with nasopharyhitis and laryngitis. May cause fluorosis, pulmonary fibrosis and severe bone changes.

Ingestion:
Acute: May cause gastrointestinal irritation, coughing, shortness of breath, sweating, nausea, vomiting, diarrhea and cramp-like pains.
Chronic: May affect the circulatory, enzyme, and nervous system.

Skin:
Acute: Severe irritant and corrosive. May cause rashes and skin granulomas.
Chronic: Sever irritant and corrosive.

Eye:
Acute: Severe irritant and corrosive.
Chronic: Severe irritant and corrosive.

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Target Organ: May affect the skeleton, kidneys, central nervous system, respiratory system, eyes and skin.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Medical Conditions Aggravated by Exposure: Pre-existing respiratory disorders.

Emergency and First Aid Procedures:

Inhalation: Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

Ingestion: Do not induce vomiting; seek medical attention immediately.

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist.

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention immediately.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled:

Wear appropriate respiratory and protective equipment specified in section VIII-Control Measures. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Waste disposal method:

Dispose of in accordance with state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

Ventilation:

Local Exhaust: Local exhaust ventilation may be necessary to control any air contaminants to within their PELs or TLVs during the use of this product.

Mechanical (General): Recommended.

Special: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established