

Material Safety Data Sheet

Identity: Barium Fluoride

Formula: BaF₂

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

Molecular weight: 175.33

CAS#	OSHA PEL	ACGIH TLV	%
7787-32-8	.5mg(Ba)/ ³	.5mg(Ba)/ ³	0-100

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 2137 °C

Vapor Pressure: (vs. air or mmHg): N/A

Melting Point: 1355 °C

Flash Point: N/A

Evaporation Rate: N/A

Solubility in water: Soluble

Specific Gravity: (water=1): 4.89g/cm³

Appearance and odor: White powder and pieces, no odor..

SECTION IV - REACTIVITY DATA

Method Used: Non-flammable

Explosive Limits: LE: N/A

UE? N/A

Extinguishing Media:

Use suitable extinguishing agent for surrounding material 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, barium fluoride may emit toxic fumes of fluoride and barium

SECTION V - HEALTH HAZARD DATA

Stability: Stable

Conditions to Avoid: None

Incompatibility: Acids and basis

Hazardous Decomposition or byproducts: Fumes of fluorine and barium.

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 Ingestions? Yes Other:? No

Signs and Symptoms of Overexposure:

Inhalation:

May cause sclerosis of the bones, calcification of ligaments, mottled teeth, osteosclerosis, ostemalacia, loss of weight, anorexia, anemia, diarrhea, and dental effects..

Ingestion:

May cause nausea, vomiting, diarrhea, and abdominal burning or cramps.

Skin:

May cause redness, itching, and/or burning.

Eye:

May cause redness, itching, watering and burning.

Health Hazards (Acute and Chronic):

Inorganic fluoride are generally highly irritating and toxic. Large doses can cause attacks of asthma and toxic. Large doses can cause attacks of asthma and severe bone changes making normal movements painful. Some signs of pulmonary fibrosis are noted. Also, enzyme system effects have been reported. Symptoms of intoxication include gastric, intestinal, circulatory, respiratory and nervous complaints and rashes. (Sax, Dangerous Properties of Industrial Materials, eight edition).

Inhalation: Acute:

May cause irritation to respiratory tract and mucous membrane, lung damage, sedation, respiratory and cardiac failure.

Chronic:

May cause pulmonary fibrosis, severe bone changes, sub-acute bronchitis, and focal hyperopic emphysema

Ingestion: Acute:

Poison by ingestion and intraperitoneal routes. May cause gastrointestinal irritation

Chronic:

May effect renal and hepatic functions, circulatory, enzyme and nervous system

Skin:

Acute:

May cause irritation and rashes

Chronic:

May cause dermatitis and skin lesions

Eye:

Acute:

May cause irritation

Chronic:

No chronic health effects recorded

Target Organs: Skeleton, kidneys, central nervous system, respiratory system and skin

Carcinogenicity:

NTP: No

IARC: No

OSHA: No

Medical conditions aggravated by exposure: Pre-existing respiratory, skin and gastrointestinal disorders

Emergency And First Aid Procedures:

Ingestion: Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

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

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

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

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. 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 approval respirator, impervious butyl gloves, safety glasses, clothes contact.

Ventilation:

Local Exhaust. To control contaminants within their PELs or TLVs during the use of this product.

Mechanical (General): Recommended.

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