

Material Safety Data Sheet

Barium iodide

Section 1 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white to off-white powder.

Warning! Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye, skin, and respiratory tract irritation. May cause allergic respiratory and skin reaction. Hygroscopic (absorbs moisture from the air). Air sensitive. Light sensitive. The toxicological properties of this material have not been fully investigated.

Target Organs: Respiratory system, muscles, skin.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Harmful if absorbed through the skin. May cause an allergic reaction in certain individuals.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. The barium ion is a muscle poison causing stimulation and then paralysis. Initial symptoms are gastrointestinal, including nausea, vomiting, colic, and diarrhea, followed by myocardial and general muscular stimulation with tingling in the extremities. Barium deposition may result in increased density of bones.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. May cause an allergic response.

Chronic: No information found.

Section 2 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 3 - Personal Protection

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the 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.

Section 4 - Physical and Chemical Properties

Physical State: Powder

Appearance: white to off-white

Odor: None reported.

pH: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 740 deg C

Decomposition Temperature: Not available.

Solubility: soluble

Section 5 - Stability and Reactivity

Chemical Stability: Air sensitive. Sensitive to light. Hygroscopic: absorbs moisture or water from the air. Exposure to light can cause decomposition forming Iodine particularly in acid conditions. Deliquescent-dissolves and become liquid by absorbing moisture from the air.

Conditions to Avoid: Light, dust generation, exposure to air, exposure to moist air or water.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Hydrogen iodide, iodine.

Hazardous Polymerization: Has not been reported.