



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

CHEMICAL IDENTITY

LABEL IDENTITY	BARIUM
FORMULA	Ba
CHEMICAL FAMILY	METAL
CAS REGISTRY NUMBER	7440-39-3
POISON: OSHA/TWA:	0.5mg(Ba)/m3

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM	Yellowish-white or silver-white metal
ODOR	ND
BOILING POINT	1600°C
DENSITY (gm/cc)	ND
VAPOR PRESSURE @ 20°	ND
% VOLATILE BY VOLUME (%)	ND
REACTION WITH WATER	Decomposes in water
EVAPORATION RATE (H2O=1)	ND
SOLUBILITY IN ALCOHOL	Soluble
MELTING POINT	710°C
SPECIFIC GRAVITY	3.6

FIRE AND EXPLOSION HAZARD DATA

Dangerous and explosive in form of dust when exposed to heat or flame or by chemical reaction.

INCOMPATIBLE WITH: acids, Cl₄, C₂Cl₃F, C₂H₂FCl₃, C₂Cl₄, C₂HCl₃, water. 1,1,2-trichloro trifluoro ethane, fluorotrichloroethane, fluorotrichloromethane can detonate in contact with barium.

HEALTH HAZARD INFORMATION

TOXICITY DATA **No data**

HMIS RATING:

HEALTH: **ND** FLAMMABILITY: **ND** REACTIVITY: **ND** PERSONAL PROTECTION: **ND**



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HEALTH HAZARD INFORMATION CONTINUED

ROUTES OF ENTRY	INHALATION:	Yes
	SKIN:	Yes
	INGESTION:	Yes
	EYE:	Yes

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: Respiratory Disorders

Poisoning due to metallic barium or insoluble barium compounds is virtually unknown in industry. Soluble barium salts are poisonous when taken by mouth. They are somewhat caustic and irritating to eyes, skin, mucous membranes. Accidental poisoning from ingestion of soluble Barium salts may result in severe abdominal pain, vomiting, dyspnea, muscular paralysis, cyanosis, death.

EMERGENCY AND FIRST AID PROCEDURES:

INGESTION: **call a physician or poison control center**

INHALATION: **remove to fresh air**

SKIN CONTACT: **wash with soap and water.**

EYE CONTACT: **flush with water for at least 15 minutes, call a physician.**

SAFE HANDLING PROCEDURES

Wear rubber gloves, safety glasses or goggles, protective clothing. Use dust mask or respirator if exposed to dust or fumes. Store in tightly closed containers, protect from heat and flame.

SPILL/LEAK INFORMATION

Sweep or scoop up, dispose of in approved landfill site in accordance with federal, state and local regulations.

References: **International Technical Information Institute, Toxic and Hazardous Industrial Chemicals Safety Manual, 1981.**

Marck Index, Mark and CO., Inc., 1983; Sax, N.I., Ed. Dangerous Properties of Industrial Materials, 1984.

Sittig, M., Ed., Handbook of Toxic and Hazardous Chemicals and Carcinogens, 1985.

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NA= NOT APPLICABLE

ND= NO DATA FOUND