



SAFETY DATA SHEET

Section 1, Identification

PRODUCT NAME: Calcium Silicon Barium
COMPANY: Himet Co., Limited
ADDRESS: RM 140 14Fl. World Commerce Center, Harbour City,7-11
Canton Road, Tsim Sha Tsu, Kowloon, Hongkong
PHONE: 00852-27369688
CHEMICAL NAME: Calcium Silicon Barium
CHEMICAL FORMULA: CaSiBa
CAS REGISTRY NUMBER: 37323-90-3
PRODUCT USE: Additive to liquid metal in steel making and foundries
of iron casting.

Section 2, Hazards identification

Emergency Overview: Irritating to skin, eyes, mucous membranes and respiratory tract.

Primary Routes of Exposure: Ingestion, inhalation, skin, eyes

Eye Contact: Causes mild irritation of the eyes.

Skin Contact: Inhalation: Causes mild irritation of the skin.

Ingestion: No specific information is available on the physiological effects of ingestion.
Causes irritation of the digestive tract.

Acute Health Affects: Irritating to skin, eyes and respiratory tract.

Chronic Health Affects: No information available on long-term chronic effects.

Section 3, Composition/information on ingredients

Ingredient	CAS #	Typical Weight	PEL-OSHA(mg/m³)	TLV-ACGIH(mg/m³)
Iron	7436-89-6	13%	10	5
Silicon	7440-21-3	55%	15	10
Calcium	7440-70-2	15%	5	2
Barium	7440-39-3	15%	0.5	0.5

Impurities total less than 2%



Section 4, First-aid measures

Eyes: Immediately flush the eyes with copious amounts of water for at least 10-15 minutes. A victim may need assistance in keeping their eye lids open. Get immediate medical attention.

SKIN: Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

INHALATION: Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

INGESTION: Seek medical attention immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

Section 5, Fire-fighting measure

FLASH POINT: None

FIRE AND EXPLOSION : None

UPPER AND LOWER FLAMMABLE LIMITS: None

AUTO IGNITION TEMPERATURE: None

USUAL FIRE OR EXPLOSION HAZARDS: If involved in a fire, this material may produce toxic fumes and gases and oxides in the form of a fine dust mixed with air

Extinguishing Medium: sand, CO₂, or dry powder extinguisher. Use no water.

SPECIAL FIRE FIGHTING PROCEDURE: If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

Section 6, Accidental release measures

In the case of a spill or leak, the material should be covered with dry soda ash, limestone, or sand

Section 7, Handling and storage

HANDLING: Avoid generating dust.

STORAGE: General storage – ambient air temperature and pressure. Keep in a cool dry place.

Section 8, Exposure controls/personal protection

SKIN AND HAND PROTECTION: Wear protective clothing and gloves.

EYE AND FACE PROTECTION: Always wear approved safety glasses when handling a chemical substance in the laboratory.



VENTILATION: Material may form a fine dust. If possible, handle the material in an efficient fume hood.

RESPIRATORY PROTECTION: If ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 1910.134.

Section 9, Physical and chemical properties

Appearance/Odor	Grey metallic/Odorless
Boiling Point	Not Applicable
Melting Point	700-935°C
Flash Point	None
Vapor Pressure	Not Applicable.
Specific Gravity (H₂O = 1)	2-2.5g/cm ³
Solubility in Water	Insoluble. Reacts violently with water.

Section 10, Stability and reactivity

STABILITY: Moisture sensitive.

POLYMERIZATION: Will not occur.

Reactivity: Reacts with water.

INCOMPATIBILITY: Incompatible with gas, mineral acids, oxidizing agents.

CONDITIONS TO AVOID: Contact of fine dust with water or mineral acids will form spontaneously flammable Silane.

Section 11, Toxicological information

ROUTES OF EXPOSURE: Eye contact. Ingestion, Inhalation. Skin contact.

CHRONIC TOXIC EFFECTS: This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.

ACUTE TOXIC EFFECTS : Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.



Section 12, Ecological information

No information available

Section 13, Disposal considerations
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DISPOSAL METHODS:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14, Transport information
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No information available

Section 15, Regulatory information

OSHA STATUE: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA CHEMICAL INVENTORY: This compound is on the EPA Toxic Substance Control Act (TSCA) inventory List

Section 16, Other information

The chemical components of this product are registered under the Toxic Substance Control Act (Title 40 CFR Part 710)

Date of Preparation: Nov. 2014