



Material Safety Data Sheet (MSDS) for Calcium Bromide

Section 1: Product Information

Product Name: Calcium Bromide
Chemical Formula: CaBr_2
CAS Number: 7789-41-5

Section 2: Hazard Identification

Classification:

Acute Toxicity (Oral) - Category 4

Skin Corrosion/Irritation - Category 2

Eye Damage/Irritation - Category 2B

Specific Target Organ Toxicity (Single Exposure) - Category 3

Signal Word: Danger

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Section 3: Composition/Information on Ingredients

Chemical Name: Calcium Bromide
Concentration: 100%

Section 4: First Aid Measures

Eye Contact: Rinse with water for at least 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Wash affected areas with plenty of water. Seek medical attention if irritation occurs.

Inhalation: Remove to fresh air. If breathing difficulties persist, seek medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.



Section 5: Fire-fighting Measures

Suitable Extinguishing Media: Water spray, foam, dry chemical, carbon dioxide.

Specific Hazards: Emits toxic fumes (hydrogen bromide) under fire conditions.

Special Protective Equipment: Wear self-contained breathing apparatus and protective clothing.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protective equipment. Avoid inhalation and skin contact.

Environmental Precautions: Prevent entry into waterways. Neutralize with soda ash or lime if spilled.

Section 7: Handling and Storage

Handling: Use in well-ventilated areas. Avoid contact with eyes, skin, and clothing.

Storage: Store in a cool, dry place away from incompatible materials. Keep containers tightly closed.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 1 mg/m³ (TWA)

ACGIH Threshold Limit Value (TLV): 1 mg/m³ (TWA)

Engineering Controls: Use local exhaust ventilation to maintain airborne concentrations below exposure limits.

Personal Protective Equipment: Wear appropriate protective clothing, gloves, and eye/face protection.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Color: Colorless to pale yellow

Odor: Odorless

Melting Point: 730°C (1346°F)

Boiling Point: 806°C (1483°F)

Solubility in Water: Soluble

Section 10: Stability and Reactivity

Stability: Stable under normal conditions.

Incompatibility: Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products: Hydrogen bromide gas.



Section 11: Toxicological Information

Acute Toxicity: LD50 (oral, rat) 5260 mg/kg

Skin Irritation: Causes irritation.

Eye Irritation: Causes serious eye irritation.

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic life. Avoid release into the environment.

Section 13: Disposal Considerations

Dispose of in accordance with local, regional, and national regulations.

Section 14: Transport Information

UN Number: 3260

Proper Shipping Name: Calcium Bromide

Transport Hazard Class: 8 (Corrosive)

Section 15: Regulatory Information

Follow all applicable regulations and guidelines.

Section 16: Other Information

This MSDS is intended to provide a summary of key information. It is not a comprehensive document. For detailed information, refer to the product label and technical data sheet.