# MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

**CHEMICAL NAME:** Mercury (II) bromide
**CAS #:** 7789-47-1
**FORMULA:** HgBr2
**SYNONYM:** Mercuric bromide, mercury dibromide

## SECTION 2 Composition and Information on Ingredients

| INGREDIENT: | CAS # | % | ACGIH (TWA) | OSHA (PEL) |
|---|---|---|---|---|
| Title Compound | 7789-47-1 | 100 | 0.25mg/m3(as Hg) | 0.05mg/m3 (as Hg) |

## SECTION 3 Hazards Identification

**EMERGENCY OVERVIEW:** Toxic by inhalation, in contact with skin and if swallowed. Prolonged exposure may permanently degrade, the central nervous system. Irritating to skin, eyes and respiratory tract. Danger of cumulative effects.
**PRIMARY ROUTES OF EXPOSURE:** Ingestion, skin, Inhalation of dust.
**EYE CONTACT:** Causes mild to severe irritation of the eyes. May deposit mercury in the lens of the eye.
**SKIN CONTACT:** Causes mild to severe irritation of the skin. Toxic through skin contact.
**INHALATION:** Toxic by inhalation. Dust causes severe respiratory and gastrointestinal distress, and may damage the central nervous system.
**INGESTION:** Toxic if swallowed. Lack of appetite, abdominal cramps, vomiting, kidney failure, paralysis. Mercury binds to thiol groups of protein.
**CHRONIC HEALTH EFFECTS:** The chronic effects of mercury poisoning include stomatitis, tremors, psychic disturbances, excessive salivation, dermatitis, and pain on chewing. Other effects include loss of memory, insomnia, lack of confidence, irritability and depression, speech and gait impairment.
**ACUTE HEALTH EFFECTS:** Danger of cumulative effects.

## SECTION 4 First Aid Measures

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.
**SKIN EXPOSURE:** Wash 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 assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

## SECTION 5 Firefighting Measures

**FLASH POINT:** not applicable
**AUTO IGNITION TEMPERATURE:** none
**EXPLOSION LIMITS:** none
**EXTINGUISHING MEDIUM:** None. Material is non-flammable
**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.
**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** If involved in a fire this material may emit toxic fumes of mercury salts.
**UNUSUAL FIRE OR EXPLOSION HAZARDS:** No unusual fire or explosion hazards.

## SECTION 6 Accidental Release Measures

**SPILL AND LEAD PROCEDURES:** To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.

## SECTION 7 Handling and Storage

**HANDLING AND STORAGE:** Store material in a tightly sealed container.

## SECTION 8 Exposure Controls and Personal Protection

**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.
**SKIN PROTECTION:** Chemical-resistant.
**VENTILATION:** If possible, handle the material in an efficient fume hood.
**RESPIRATOR:** If in form of fine dust and 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 19-10.134.

## SECTION 9 Physical and Chemical Properties

**COLOR AND FORM:** white powder
**MOLECULAR WEIGHT:** 360.44
**MELTING POINT (DEG. C.):** none
**BOILING POINT:** 322$^{o}$
**VAPOR PRESSURE:** no data
**SPECIFIC GRAVITY:** 6.109
**SOLUBILITY IN WATER:** .61g/100cc (25$^{o}$C)

## SECTION 10 Stability and Reactivity

**STABILITY:** air and moisture stable

**HAZARDOUS POLYMERIZATION:** no hazardous polymerization
**CONDITIONS TO AVOID:** none
**INCOMPATIBILITY:** chlorine and active metals
**DECOMPOSITION PRODUCTS:** none

## SECTION 11 Toxicological Information

**RTECS DATA:** Oral (rat); LD50: 40 mg/kg. Administration onto the skin (rat); LD50: 100 mg/kg. Oral (mouse); LD50: 35 mg/kg. Intraperitoneal (mouse); LD50: 5 mg/kg.
**MUTAGENIC EFFECTS:** no data
**TETRATOGENIC EFFECTS:** no data
**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 Ecological Information

**ECOLOGICAL INFORMATION:** No information available

## SECTION 13 Disposal Considerations

**DISPOSAL:** Dispose of in according to local state and federal regulations.

## SECTION 14 Transportation Information

Mercury bromides, Class 6.1, UN 1634, PG II

## SECTION 15 Regulatory Information

**TSCA:** Listed in the TSCA inventory
**SARA (TITLE 313):** Title compound : See category N458 for reporting.

## SECTION 16 Other Information

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.
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