



# LABORATORY REAGENT

INDO GULF COMPANY TEL - 0091-22-2345522-/356. FAX - 23476535.

## Material Safety Data Sheet Calcium bromide hydrate

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Calcium bromide hydrate  
**Synonyms:** Calcium dibromide dihydrate.

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
71626-99-8	Calcium bromide hydrate	100	unlisted

### Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Appearance: white to off-white solid.

**Warning!** Causes severe eye irritation and possible eye injury. May cause skin and respiratory tract irritation. Hygroscopic (absorbs moisture from the air).

**Target Organs:** Eyes.

### Potential Health Effects

**Eye:** Causes severe eye irritation.

**Skin:** Causes mild skin irritation. Causes skin irritation and possible severe skin irritation especially if the skin is wet or moist.

**Ingestion:** May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea. MSDS from Bromine Compounds LTD. says under ingestion that calcium bromide "May cause falling asleep, muscular incoordination and respiratory depression."

**Inhalation:** May cause respiratory tract irritation.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis. Repeated oral intake of bromides (>9 mg/kg/day) may affect the central nervous system. Warning symptoms include mental dullness, slurred speech, weakened memory, apathy, anorexia, constipation, drowsiness and loss of sensitivity to touch and pain.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. 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 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**Extinguishing Media:** Use extinguishing media most appropriate for the surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

#### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Avoid breathing dust. Do not get in eyes. Avoid contact with skin and clothing.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

#### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Calcium bromide hydrate	none listed	none listed	none listed
Calcium bromide (CaBr <sub>2</sub> )	none listed	none listed	none listed

**OSHA Vacated PELs:** Calcium bromide hydrate: No OSHA Vacated PELs are listed for this chemical. Calcium bromide (CaBr<sub>2</sub>): No OSHA Vacated PELs are listed for this chemical.

**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 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** white to off-white

**Odor:** Odorless.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 760 deg C (dec)

**Decomposition Temperature:** > 700 deg C

**Solubility:** Soluble.

**Specific Gravity/Density:** 3.35

**Molecular Formula:** Br<sub>2</sub>Ca.2H<sub>2</sub>O

**Molecular Weight:** 235.93

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. Hygroscopic: absorbs moisture or water from the air. Becomes yellow on long exposure to air.

**Conditions to Avoid:** Dust generation, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Strong acids.

**Hazardous Decomposition Products:** Hydrogen bromide, bromine.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS# 71626-99-8** unlisted.

**CAS# 7789-41-5:** EV9328000

**LD50/LC50:**

Not available.

CAS# 7789-41-5:

Oral, rat: LD50 = 4100 mg/kg;

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**Carcinogenicity:**

CAS# 71626-99-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 7789-41-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Water flea Daphnia: > 105 mg/L; 48H; EC50

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

## Section 14 - Transport Information

	IATA	
Shipping Name:	Not Regulated	
Hazard Class:		
UN Number:		
Packing Group:		

#### Section 15 - Regulatory Information

**Hazard Symbols:**

XI

**Risk Phrases:**

R 36 Irritating to eyes.

**Safety Phrases:**

S 22 Do not breathe dust.

S 24 Avoid contact with skin.

#### Section 16 - Additional Information

**MSDS Creation Date:** 10/14/1999

**Revision #4 Date:** 11/08/2005

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51/57, dontad street, 1st floor, off no.11, mumbai - 400 009, india  
[www.indogulfgroup.com](http://www.indogulfgroup.com)