



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Calcium bromide

Cat No.: 35684

CAS No. : 7789-41-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended uses : Laboratory chemicals

Uses advised against: Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company : Krishna Solvechem Limited.
B/503, Sahayog, S. V. Road,
Kandivali (West), Mumbai – 400067. India.

Telephone : +91-22-6123 0222

Email : exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 CLP Classification – Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met.

Health hazards

Serious Eye Damage / Eye irritation

Environmental hazards

Based on available data, the classification criteria are not met

2.2 Label elements

Pictogram :



Signal word

Danger



Hazard statement (s)	Causes serious eye damage
Precautionary statement (s)	
Prevention	<p>Wash face, hands and any exposed skin thoroughly after handling</p> <p>Wear protective gloves/protective clothing/eye protection/face protection</p> <p>Avoid breathing dust/fume/gas/mist/vapors/spray</p> <p>Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>Immediately call a POISON CENTER or doctor/physician</p>
Other hazards	No information available

SECTION 3: Composition / information on ingredients

3.1

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Calcium bromide	7789-41-5	EEC No. 232-164-6	<=100	Eye Dam. 1 (H318)

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice:	If symptoms persist, call a physician.
If inhalation :	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
In case of skin contact :	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion :	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
4.2 Most important symptoms and effects :	Causes eye burns. Causes severe eye damage
4.3 Notes to Physician :	Treat symptomatically



SECTION 5: Firefighting effects

5.1 Extinguishing media	
Suitable extinguishing media	Not combustible.
Unsuitable Extinguishing Media: :	No information available
Autoignition Temperature:	No information available
Explosion Limits:	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
5.2 Specific Hazards Arising from the Chemical :	
Hazardous Combustion Products :	Thermal decomposition can lead to release of irritating gases and vapors. Hydrogen bromide, Calcium oxides
5.4 Protective Equipment and Precautions for Firefighters:	
	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	
Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.	
6.2 Environmental precautions	
Should not be released into the environment. See section 12 for additional Ecological information.	
6.3 Methods and materials for containment and cleaning up	
Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal.	
6.4 Reference to other sections	
Refer to protective measures listed in sections 8 and 13.	



SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2 Conditions for safe storage

Protect from light. Store under an inert atmosphere. Keep container tightly closed in a dry and well-ventilated place. Protect from moisture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limits

This product as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable Dust

8.2 Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source



8.2 Exposure controls

Personal protective equipment -

Eye / Face protection

Goggles (European Standard-EN166)

Hand protection

Protective gloves

Skin protection and body protection

Long sleeved clothing

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Particle filtering: EN149:2001

When PE is used a face piece Fit Test should be conducted

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: Solid
b) Odour	Odorless
c) Odour Threshold	No information available
d) pH	No information available
e) Melting point / freezing point	730 °C / 1346 °F
f) Initial boiling point and boiling range	806 - 812 °C / 1482.8 - 1493.6 °F
g) Flash point	No information available
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	No data available No data available
k) Vapour pressure	No data available
l) Vapour density	No data available



m) Specific Gravity	3.353 g/cm ³ @20 °C
n) Solubility	No data available
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	No information available
q) Decomposition temperature	No information available
r) Viscosity	Not applicable
s) Molecular formula	Br ₂ Ca
t) Molecular Weight	199.90

SECTION 10: Stability and Reactivity

10.1 Reactive Hazard :	None known, based on information available
10.2 Chemical stability :	Hygroscopic, Light sensitive
10.3 Possibility of hazardous reactions :	None under normal processing.
10.4 Conditions to avoid :	Exposure to light. Exposure to moist air or water
10.5 Incompatible materials:	Oxidizing agent
10.6 Hazardous decomposition products :	Hydrogen bromide. Calcium oxides
10.7 Hazardous Polymerization	No information available

SECTION 11: Toxicological information

11.1	
Information on toxicological effects	
Acute toxicity:	
Product Information:	
Acute toxicity :	
Oral	Based on available data, the classification criteria are not met
Dermal	No data available
Inhalation	No data available
LD50 Oral	LD50 = 4100 mg/kg (Rat)



<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u>	
Irritation :	Category 1
Sensitization:	No information available
Carcinogenicity :	There are no known carcinogen chemicals in this product
Mutagenic Effects:	No information available.
Reproductive Effects:	No information available.
Developmental Effects :	No information available.
Teratogenicity:	No information available.
STOT - single exposure :	None known
STOT - repeated exposure:	None known
Aspiration hazard :	No information available.
Symptoms / effects,both acute and delayed	No information available
Endocrine Disruptor Information :	No information available
Other Adverse Effects :	The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1	
Ecotoxicity:	Do not empty into drains.
12.2 Persistence and degradability:	Not relevant for inorganic substances
Bioaccumulation/ Accumulation	No information available
12.3 Mobility:	No information available



SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Waste from Residues/unused products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations

contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer.

SECTION 14: Transport information

14.1 IMDG/IMO	Not regulated
ADR	Not regulated
IATA	Not regulated

SECTION 15: Regulatory information

International Inventories:

X = listed, Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), China (IECSC), Japan (ENCS), Australia (AICS), Korea (ECL).

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Calcium bromide	232-164-6	-		X	X	-	X	X	X	X	KE-04485

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals
Not applicable

National Regulations

WGK Classification See table for values

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Calcium bromide	WGK1	

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

15.2 Chemical safety assessment:

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted



SECTION 16: Other information

16.1 Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.