



MATERIAL SAFETY DATA SHEET

Product Name Calcium Bromide Brine
Product id 1390S
Revision date 17/01/2006 **Revision: 5**
Supersedes 20/10/2002

Chemical name Calcium bromide water solution
Chemical family Inorganic bromide
Molecular weight 199.88
Type of product and use For use in completion and workover fluids.
Supplier Ameribrom, INC.
 2115 Linwood Avenue, Fort Lee, New Jersey 07024-5004
 USA Tel: 201 242 6560
Emergency Telephone Chemtrec (800)424-9300

Components CAS	Weight %	ACGIH-TLV Data	OSHA (PEL) Data
Calcium Bromide 7789-41-5	52	Not determined	Not determined

Emergency overview *Colourless liquid, odourless*
Risk of serious damage to eyes

Potential Health Effects:

- Eye Contact Severe irritant.
- Skin contact Irritant
- Inhalation Irritant to upper respiratory tract.
- Ingestion Abdominal pain, nausea and vomiting. May cause falling asleep, muscular incoordination and respiratory depression.



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Eye contact Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.

Skin contact Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before re-use. Get medical attention immediately.

Inhalation In case of mist inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.

Ingestion If swallowed, wash mouth thoroughly with plenty of water and give water to drink. Get medical attention immediately.

NOTE: Never give an unconscious person anything to drink.

Notes to the physician Severe irritant
No specific antidote. In case of ingestion DO NOT induce vomiting. Treat symptomatically and supportively.

Flash point	None
Flammable/Explosion limits	Not flammable
Auto-ignition temperature	Not applicable
Suitable extinguishing media	Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.
Fire fighting procedure	Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.
Unusual fire and explosion hazards	CaBr ₂ will decompose slowly from ca. 700°C, releasing poisonous and corrosive fumes of hydrogen bromide and bromine.

Personal precautions Wear respirator, chemical safety goggles, rubber gloves and boots.



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Methods for cleaning up Absorb on sand or vermiculite and place in closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

Handling Keep containers tightly closed. Avoid bodily contact.

Storage Keep in a well-ventilated place away from incompatible materials (see "materials to avoid").

ventilation requirements Provide adequate ventilation. Use local exhaust as necessary, especially under misting conditions.

Personal protective equipment:

- Respiratory protection	Approved respirator
- Hand protection	Protective gloves
- Eye protection	Chemical safety goggles
- Skin and body protection	Body covering clothes and boots
Hygiene measures	Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking

Appearance	Colourless liquid, odourless
Melting point/range	< -7°C
Boiling point/range	130°C
Vapour pressure	Not available
Vapor density	Not available
Evaporation rate (ether=1)	As of water

Solubility:

- Solubility in water	For CaBr ₂ 100%: 142 g/100ml at 30°C 312 gr/100ml at 100°C
- Solubility in other solvents	Acetone Pyridine Alcohol



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Specific gravity	1.7
Decomposition temperature	>700 °C (CaBr ₂ 100%)

Stability	Stable under normal conditions
Materials to avoid	Avoid strong acids and oxidizers
Conditions to avoid	Heating above decomposition temperature
Hazardous decomposition products	Hydrogen bromide and bromine
Hazardous polymerization	Will not occur

Note:	The toxicological data presented below are the results of studies conducted on an active ingredient CaBr ₂ .
Acute toxicity:	
- Rat oral LD ₅₀	2210 mg/kg
- Eye irritation (rabbit)	Severe irritant
- Dermal irritation (rabbit)	Moderate irritant
Chronic toxicity	Repeated skin contact may cause dermatitis. Repeated oral intake of bromides (>9 mg/kg body weight/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.
Mutagenicity	Not mutagenic by the Ames Test
Carcinogenicity	Not classified by IARC. Not included in NTP 11th Report on Carcinogens.

Aquatic toxicity :	
- 48 Hour-EC ₅₀ , <i>Daphnia magna</i>	>105 mg/l (For CaBr ₂ 95%)

Waste disposal	Drain into sewer with ample water. Observe all federal, state and local environmental regulations when disposing of this material.
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DOT Not regulated

IMO Not regulated

ICAO/IATA Not regulated

USA Reported in the EPA TSCA Inventory

Canada Listed in DSL

EEC No. 232-164-6

Japanese METI ENCS No.: 1-1038

Australia Listed in AICS

China inventory Listed

Korea Listed in ECL (KE-04485)

Philippines Listed in PICCS

Switzerland Listed in Giftliste 1 (G-7923)

This data sheet contains changes from the previous version in section(s)

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Health, Safety & Environment Policy

We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs

We accept that the success of our business is dependent on the supply of products and services that will benefit society whilst ensuring human safety and protection of the environment and natural resources

Within the framework of our commitment to the Responsible Care program, we will provide a healthy and safe work environment for employees and will responsibly manage our products at all stages of their life cycle in order to protect human health and the environment whilst maintaining high production standards of operation

TO MEET THIS COMMITMENT WE WILL:

Comply with or exceed applicable national and international regulatory requirements and other requirements to which we subscribe

Communicate openly and actively encourage dialogue with employees, customers and community concerning our products and operations

Implement documented management systems consistent with and for promotion of the Responsible Care ethics

Develop and supply products that can be manufactured, transported, used and disposed of safely whilst best meeting the needs of our customers

Regularly assess, continually improve and responsibly manage health, safety and environmental risks associated with products and processes throughout their life-cycles

Share knowledge and expertise with others and seek to learn from and incorporate improved practices into our own operations

Educate and train employees, contractors and customers to improve their HSE performance

Communicate up-to-date information to enable our workers, customers and other interested parties to handle our products in a safe and environmentally responsible manner

Endeavor to work with customers, suppliers, distributors and contractors to foster the safe use, transport and disposal of our chemicals

Support Product Stewardship programs in cooperation with customers, distributors and transporters

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In an event of discrepancy between the contents of this MSDS and the English version of it, the English version shall prevail.



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End of safety data sheet