

# SAFETY DATA SHEET

Creation Date 26-September-2009 Revision Date 28-December-2021 **Revision Number** 6

1. Identification

**Product Name** Calcium bromide hydrate

Cat No.: AC450630000, AC450630025, AC450632500

CAS-No 71626-99-8

**Synonyms** Calcium dibromide hydrate.

**Recommended Use** Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Manufacturer Importer/Distributor Fisher Scientific Company

Acros Organics Fisher Scientific One Reagent Lane 112 Colonnade Road. Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Serious Eye Damage/Eye Irritation Category 1

Label Elements

Signal Word Danger

**Hazard Statements** 

Causes serious eye damage



## **Precautionary Statements**

#### Prevention

Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER/doctor

### **Disposal**

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
Calcium bromide, hydrate	71626-99-8	>95	
Calcium bromide (CaBr2)	7789-41-5	-	

## 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing,

give artificial respiration.

**Ingestion** Do NOT induce vomiting. Get medical attention.

Most important symptoms/effects

Causes eye burns. Causes severe eye damage.

**Notes to Physician** 

Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

## **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and

### Calcium bromide hydrate

sources of ignition.

#### **Hazardous Combustion Products**

Hydrogen halides.

## **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.

NFPA

HealthFlammabilityInstabilityPhysical hazards200N/A

## 6. Accidental release measures

Personal Precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact

with eyes. Avoid dust formation.

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Do not let **Up** this chemical enter the environment.

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.
Storage.	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Metals. Strong acids. Strong bases.

## 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

## **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. 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

### Personal protective equipment

**Eye Protection** Goggles **Hand Protection** Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Natural rubber Nitrile rubber Neoprene PVC	See manufacturers recommendations	-	Splash protection only

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, gloves with care avoiding skin contamination.

### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

### **Environmental exposure controls**

No information available.

#### **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.

## 9. Physical and chemical properties

Physical StateSolidAppearanceWhiteOdorOdorless

Odor Threshold<br/>pHNo information available<br/>7-10 1% aq.solMelting Point/Range730 °C / 1346 °FBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific Gravity 3.35

SolubilityNo information availablePartition coefficient; n-octanol/waterNo data availableAutoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNot applicable

Molecular Formula Br2 Ca . x H2 O

Molecular Weight 199.9

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Hygroscopic.

**Conditions to Avoid** Incompatible products. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Metals, Strong acids, Strong bases

Hazardous Decomposition Products Hydrogen halides

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

Product Information No acute toxicity information is available for this product Component Information

### Calcium bromide hydrate

Component LD50 Oral		LD50 Dermal	LC50 Inhalation	
Calcium bromide (CaBr2)	LD50 = 4100 mg/kg (Rat)	LD50 > 2000 mg/kg (Rabbit)	Not listed	

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes severe eye irritation and possible burns

Sensitization No information available

The table below indicates whether each agency has listed any ingredient as a carcinogen. Carcinogenicity

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Calcium bromide, hydrate	71626-99-8	Not listed				
Calcium bromide (CaBr2)	7789-41-5	Not listed				

Not mutagenic in AMES Test **Mutagenic Effects** 

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

None known STOT - single exposure STOT - repeated exposure None known

**Aspiration hazard** No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods** 

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOT Not regulated Not regulated TDG Not regulated IATA IMDG/IMO Not regulated

# 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Calcium bromide, hydrate	71626-99-8	ı	ı	1	•	-	-	i
Calcium bromide (CaBr2)	7789-41-5	X	-	Х	ACTIVE	232-164-6	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Calcium bromide, hydrate	71626-99-8	-	-	-	-	X	-	X	-
Calcium bromide (CaBr2)	7789-41-5	X	KE-04485	Х	X	X	X	Х	X

#### Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## **Other International Regulations**

### Authorisation/Restrictions according to EU REACH

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Calcium bromide, hydrate	71626-99-8	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide (CaBr2)	7789-41-5	Listed	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	(2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Calcium bromide, hydrate	71626-99-8	Not applicable	Not applicable	Not applicable	Not applicable
Calcium bromide (CaBr2)	7789-41-5	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Creation Date 26-September-2009 Revision Date 28-December-2021

Revision Date 28-December-2021

## Calcium bromide hydrate

**Print Date** 

28-December-2021

**Revision Summary** 

This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

### 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 a 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

**End of SDS**