



# SAFETY DATA SHEET

Preparation Date: 03/25/2015 Revision date 9/5/2019 Revision Number: G5

## 1. IDENTIFICATION

**Product identifier** 

Product code: P1225

Product Name: POTASSIUM BROMIDE, CRYSTAL, IR GRADE

Other means of identification

Synonyms: Bromide salt of potassium; Tripotassium tribromide

CAS #: 7758-02-3
RTECS # TS7650000
CI#: Not available

Recommended use of the chemical and restrictions on use

**Recommended use:** In the manufacture of photographic paper and plates. Process engraving.

Laboratory reagent.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300

<u>Contact Person:</u> Tom Tyner (USA - West Coast)

Contact Person: Ibad Tirmiz (USA - East Coast)

## 2. HAZARDS IDENTIFICATION

# Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

#### Label elements

# Warning

# Hazard statements

Causes skin irritation Causes serious eye irritation May cause respiratory irritation

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#### Hazards not otherwise classified (HNOC)

Not Applicable

#### Other hazards

May be harmful if swallowed

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear protective gloves Wear eye/face protection

#### **Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

#### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed Store locked up

# **Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Potassium Bromide	7758-02-3	100

## 4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

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BROMIDE, CRYSTAL, IR GRADE

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Obtain medical attention.

#### Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation

Causes skin irritation

Irritating to respiratory system

May cause central nervous system effects

Ingestion may cause nausea, vomiting, and diarrhea

May cause headache May affect the liver It may affect the kidneys

#### Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

#### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

# 5. FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire,

extinguish the fire using an agent suitable for the type of

surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products

No information available.

Specific hazards No information available.

**Special Protective Actions for Firefighters** 

Specific Methods: No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

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#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin,

eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged

containers or spilled material unless wearing appropriate protective clothing.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains. Prevent entry into waterways, sewers, basements or confined areas.

#### Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

# Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

# **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Hygroscopic. Protect from moisture.

#### **Incompatible Materials:**

Acids

Oxidizing agents

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

### National occupational exposure limits

## **United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Potassium Bromide	7758-02-3	None	None	None	None

#### Canada

Component	CAS No	Canada - Alberta	Canada - British	Canada - Ontario	Canada - Quebec
			Columbia		
Potassium Bromide	7758-02-3	None	None	None	None

# **Australia and Mexico**

Component	CAS No	Australia	Mexico

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Potassium Bromide	7758-02-3	None	None

# **Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Use process enclosures,

local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants

below the exposure limit.

# Individual protection measures, such as personal protective equipment

### **Personal Protective Equipment**

**Eye protection:** Safety glasses with side-shields. or Goggles

**Skin and body protection:** Chemical resistant apron

Gloves

Long sleeved clothing

**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to

the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified

respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and

immediately after handling the product When using, do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Appearance:Color:SolidCrystalline. Crystals.White.

Odor:TasteFormulaOdorless.Bitter. Pungent. Saline.KBr

Molecular/Formula weight (g/mole): Flammability (solid, gas) Flashpoint (°C/°F):

119.00 no data available No information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not available No information available No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F):

No information available 730°C/1346°F No information available

Boiling point/range(°C/°F): Bulk density: Density (g/cm3):

1435°C/2615°F No information available No information available

Specific gravity: pH Vapor pressure @ 20°C (kPa):

2.75 No information available

Evaporation rate: Vapor density: VOC content (g/L):
No information available No information available No information available

io information available no information available no information available

Odor threshold (ppm): Partition coefficient

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No information available (n-octanol/water): Viscosity:

No information available 
No information available

Miscibility: Solubility:

No information available Easily soluble in cold water

Easily soluble in hot water Insoluble in Acetate

Slightly soluble in diethyl ether

Solubility in Water: 1g/1.5mLSolubility in Boiling water: 1g/1mLSolubility in Alcohol: 1g/250mLSolubility in Boiling

Alcohol: 1g/21mL

# 10. STABILITY AND REACTIVITY

Reactivity

Reactive with acids
Reactive with oxidizing agents

It is rapidly attacked by bromine trifluoride

**Chemical stability** 

Stability: Hygroscopic. Stable at normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

<u>Conditions to avoid:</u> Heat. Incompatible materials. Exposure to moisture. Exposure to moist air.

Incompatible Materials: Acids

Oxidizing agents

Hazardous decomposition

products:

No information available.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

# **Principal Routes of Exposure:**

Ingestion. Inhalation.

# **Acute Toxicity**

# Component Information

Potassium Bromide
CAS No | 7758-02-3

**LD50/oral/rat =** = 3070 mg/kg Oral LD50 Rat

LD50/oral/mouse = 3120 mg/kg Oral LD50 Mouse

**LD50/dermal/rabbit** = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 or LC50information = 980 mg/kg Intraperitoneal LD50 Guinea pig

#### **Product Information**

LD50/oral/rat =

Value - Acute Toxicity = 3070 mg/kg

LD50/oral/mouse =

Value - Acute Tox = 3120 mg/kg

LD50/dermal/rabbit

Value - Acute Toxicity = No information available

LD50/dermal/rat

**VALUE - Acute Tox =** No information available

LC50/inhalation/rat

VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye irritation.

**Inhalation** Irritating to respiratory system.

**Ingestion** May be harmful if swallowed. Ingestion may cause nausea, vomiting, diarrhea.

May cause headache. May affect behavior/central nervous system (ataxia, irritability, somnolence). May affect behavior/central nervous system (lethargy, fatigue). May affect behavior/central nervous system (hallucinations, insomnia).

May affect behavior/central nervous system (confusion). May affect

behavior/central nervous system (coma). May cause salivation. May affect the kidneys. May affect liver. May cause vision disturbances. May cause blurred or

foggy vision. May cause mydriasis (dilated pupils).

**Aspiration hazard** No information available.

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

**Chronic Toxicity** Prolonged or repeated ingestion may cause skin rashes (bromoderma, acne,

pyoderma gangrenosum, erythema multiforme), affect the liver (hepatic enzymes increased), endocrine system (thyroid), metabolism (anorexia), blood (anemia), vision (visual disturbances, permanently decreased vision), and may produce a

toxic syndrome called "bromism." "Bromism" may be characterized by

behavior/central nervous symptoms such CNS depression, irritability, headache, confusion, slurred speech, memory loss, lethargy, ataxia, tremor, agitation, delusion, disoriented, paranoia, aggressiveness, hallucinations, mania, fatigue,

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seizure, neuropathy, muscle weakness, drowsiness, stupor, coma. Also, in individuals with chronic bromism, the tongue may have a coated or furred appearance. Hearing impairment, which may be permanent, is an uncommon effect of chronic or acute bromide intoxication. Chronic bromide ingestion can cause Hyperchloremia. Hyperchloremia can occur because chronic Bromide ingestion produces progressive renal reabsorption of bromide ions and decreased chloride reabsorption.

**Sensitization:** No information available.

Mutagenic Effects: May affect genetic material

Carcinogenic effects: Not considered carcinogenic.

	Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
F	Potassium Bromide	7758-02-3	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects:No information availableDevelopmental Effects:No information availableTeratogenic Effects:No information available

**Specific Target Organ Toxicity** 

STOT - single exposure respiratory system.
STOT - repeated exposure No information available.
Target Organs: Central nervous system.

## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

Potassium Bromide - 7758-02-3

Fish 30 mg/L LC50 Pimephales promelas 96 h static 1

Crustacea 30 mg/L EC50 Daphnia magna 96 h

Persistence and degradability: No information available

**Bioaccumulative potential:** No information available.

Mobility in soilNo information availableOther adverse effectsNo information available.

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#### 13. DISPOSAL CONSIDERATIONS

# **Disposal Methods**

# Waste from residues / unused products:

Waste must be disposed of in accordance with Federal. State and Local regulation.

#### Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Potassium Bromide	7758-02-3	None	None	None	None

#### 14. TRANSPORT INFORMATION

DOT

**UN-No:** Not Regulated

Proper Shipping Name: No information available Hazard Class No information available Subsidiary Class No information available Packing group: No information available Emergency Response Guide No information available

Number

Marine PollutantNo data availableDOT RQ (lbs):No information availableSpecial ProvisionsNo Information availableSymbol(s):No information availableDescription:No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
Packing Group:
Marine Pollutant
Description:
No information available

**ADR** 

UN Number Not regulated

Proper Shipping Name:
Transport hazard class(es)
Packing group
Subsidiary Risk:

No information available
No information available
No information available

**IMDG** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

**RID** 

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group

No information available
No information available
No information available

ICAO (air)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
No information available
No information available
No information available
No information available

**IATA** 

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group
Precautionary Statements No information available
No information available
No information available
No information available

Response

Special Provisions No information available

# 15. REGULATORY INFORMATION

#### **International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Potassium Bromide	7758-02-3	PresentACTIV E	Present KE-29079	Present	Present (1)-108	Present	Present	Present 231-830-3

#### **U.S. Regulations**

Potassium Bromide

FDA - Direct Food Additives 21 CFR 173.315

FDA - 21 CFR - Total Food Additives 173.315, 178.1010, 178.2010

- List Sourced from EAFUS

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

## Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	<b>Developmental Toxicity</b>	Male	Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Potassium Bromide	7758-02-3	Not Listed	Not Listed	Not Listed	Not Listed

#### CERCLA/SARA

Γ	Component	CAS No	CERCLA -	Section 302	Section 302	Section 313 -	Section 313 -
	-		Hazardous	Extremely	Extremely	Chemical Category	Reporting
			Substances and	Hazardous	Hazardous		de minimis
			their Reportable	Substances	Substances and		
L			Quantities	and TPQs	RQs		
1	Potassium Bromide	7758-02-3	None	None	None	None	None

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#### U.S. TSCA

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Potassium Bromide	7758-02-3	Not Applicable	Not Applicable

#### Canada

#### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification

Information:

Component Potassium Bromide 7758-02-3 ( 100 )

WHMIS 2015 Hazard Classification

Serious Eye Damage/Eye Irritation - Category 2A: H319 Causes

serious eye irritation.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

#### **DSL/NDSL**

	CAS No	Canada (DSL)	Canada (NDSL)
Potassium Bromide	7758-02-3	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Potassium Bromide	7758-02-3	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
Potassium Bromide	7758-02-3	Not listed

#### **EU Classification**

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Potassium Bromide	7758-02-3	

# EU - CLP (1272/2008)

#### R-phrase(s)

R36/37/38 - Irritating to eyes, respiratory system and skin

# S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S37 - Wear suitable gloves

Component	CAS No	Classification	Concentration	Safety Phrases
			Limits:	
Potassium Bromide	7758-02-3		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

# Indication of danger:

Xi - Irritant

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# **16. OTHER INFORMATION**

Preparation Date:03/25/2015Revision date9/5/2019Prepared by:Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the

completeness or accuracy of the information contained herein.

**End of Safety Data Sheet** 

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