

Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: Identification

Product identifier

Trade name/designation: Bromate-Bromide solution 0.1N

Product No.: BDH7862

Synonymes: no data a vailable CAS No.: not a pplicable

Other means of identification:

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

Recommended Use: For Further Manufacturing Use Only Uses a dvised against: Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Supplier

VWR International LLC

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Building One, Suite 200 P. O. Box 6660

Postal code/city Radnor, PA 19087

Telephone +1-800-932-5000 toll-free within US/Canada

+1-610-386-1700

Telefax: +1-610-728-2103



Emergency telephone

Telephone +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA)

Preparation Information

VWR International - Product Information Compliance

E-mail sds@vwr.com

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

Hazard classes and hazard categories	Hazard statements
Carcinogenicity, category 1B	H350

2.2 Label elements

Labelling in accordance with 29 CFR 1910.1200 (OSHA HCS)

Hazard pictograms



Signal word: Danger

Hazard statements	
H350	May cause cancer.

Precautionary statements	
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Hazards not otherwise classified (HNOC)

none/none



SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Hazardous ingredients Classification according to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Substance name	Concentration	Product identifier	Hazard classes and hazard categories
Potassium bromate	0.1 - 1%	CAS No.: 7758-01-2	Ox. Sol. 1 - H271 Carc. 1B - H350 Acute Tox. 3 - H301
Potas sium bromide	1 - 3%	CAS No.: 7758-02-3	Eye Irrit. 2 - H319 Skin Irrit. 2 - H315 STOT SE 3 - H335

SECTION 4: First aid measures

4.1 General information

IF exposed or if you feel unwell: Calla POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, a dminister a rtificial respiration.

In case of skin contact

After contact with skin, washimmediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids a part and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion

If a cci dentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

4.2 Most important symptoms/effects, acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician



SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

no restriction

5.2 Specific hazards arising from the chemical

In case offire may be liberated: Pyrolysis products, toxic

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.

Protective equipment and precautions for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.

Do not inhale explosion and combustion gases.

Use water spray/stream to protect personnel and to cool endangered containers.

In case of fire: Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

 $\label{lem:decomposition} \mbox{Discharge into the environment must be avoided.}$

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact U se extractor hood (laboratory). If handled uncovered, a rrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data a vailable

 $Keep\ container\ tightly\ closed\ and\ in\ a\ well-ventilated\ place.\ Keep/Store\ only\ in\ original\ container.$



7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)

Wears uitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

We arsuitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

Respiratory protection

Respiratory protection necessary at: a erosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protections hould be worn.

Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid

Color: no data a vailable
(b) Odour: no data a vailable
(c) Odour threshold: no data a vailable

Safety relevant basic data

(d) pH:no data a vailable(e) Melting point/freezing point:no data a vailable(f) Initial boiling point and boiling range:no data a vailable(g) Flash point:no data a vailable(h) Eva poration rate:no data a vailable(i) Flammability (solid, gas):not a pplicable

(j) Flammability or explosive limits

Lower explosion limit: no data a vailable
Upper explosion limit: no data a vailable
(k) Va pour pressure: no data a vailable
(l) Va pour density: no data a vailable
(m) Relative density: no data a vailable

(n) Solubility(ies)

Water solubility (g/L):
Soluble (g/L) in Ethanol:
no data a vailable
no data a vailable
(o) Partition coefficient: n-octanol/water:
no data a vailable
(p) Auto-ignition temperature:
no data a vailable
(q) Decomposition temperature:
no data a vailable

(r) Viscosity

Kinematic viscosity: no data a vailable
Dynamic viscosity: no data a vailable
(s) Explosive properties: not a pplicable
(t) Oxidising properties: not a pplicable

9.2 Other information

Bulk density:not a pplicableRefraction index:no data a vailableDissociation constant:no data a vailableSurface tension:no data a vailableHenry constant:no data a vailable

SECTION 10: Stability and reactivity

10.1 Reactivity



10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

no data available

10.6 Hazardous decomposition products

no data available

10.7 Additional information

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity:

Potassium bromate - LD50: > 157 mg/kg - Rat - (RTECS)

Potassium bromide - LD50: > 3070 mg/kg - Rat - (Merck KGaA)

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

no data available

Irritant and corrosive effects

Primary irritation to the skin:

not applicable

Irritation to eyes:

not applicable

Irritation to respiratory tract:

 $not\,a\,p\,plicable$



Respiratory or skin sensitization

In case of skin contact: not sensitising After inhalation: not sensitising

STOT-single exposure

 $not\,a\,p\,plicable$

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

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

no data a va ilable	ACGIH	IARC	NTP	OSHA

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects

no data available

Additional information

no data available

SECTION 12: Ecological information

12.1 Ecotoxicity

Fish toxicity:

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:



12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose a ccording to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

no data available

SECTION 14: Transport information

Land transport (DOT)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.



SECTION 15: Regulatory information

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

SARA 313 Components

- Potassium bromate - CAS No.: 7758-01-2

Massachusetts Right To Know Components

- Potassium bromate - CAS No.: 7758-01-2

Pennsylvania Right To Know Components

- Potassium bromate - CAS No.: 7758-01-2

New Jersey Right To Know Components

- Potassium bromate - CAS No.: 7758-01-2

California Prop. 65 Components

- Potassium bromate - CAS No.: 7758-01-2 (cancer)



SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

DOT - Department of Transportation

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport As sociation-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization - Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

Additional information

Indication of changes: general update

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.