

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 1 of 10

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

#### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

**1.4. Emergency telephone** For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# Regulation (EC) No 1272/2008

Carc. 1B; H350

Full text of hazard statements: see SECTION 16.

# 2.2. Label elements

#### Regulation (EC) No 1272/2008

# Hazard components for labelling

potassium bromate

Signal word: Danger

Pictograms:



# **Hazard statements**

H350 May cause cancer.

# **Precautionary statements**

P201 Obtain special instructions before use.



according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 2 of 10

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

## Special labelling of certain mixtures

Restricted to professional users.

#### 2.3. Other hazards

No data available

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

# **Chemical characterization**

Mixtures in aqueous solution

#### Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7758-01-2	potassium bromate			< 1 %
	231-829-8	035-003-00-6	01-2119518844-34	
	Ox. Sol. 1, Carc. 1B, Acute Tox. 3; H271 H350 H301			

Full text of H and EUH statements: see section 16.

# Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7758-01-2	231-829-8	potassium bromate	< 1 %
oral: LD50 = 157 mg/kg			

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

#### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

## **General information**

Take off immediately all contaminated clothing.

## After inhalation

Provide fresh air.

Call a physician immediately.

## After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

## After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

## After ingestion

Rinse mouth immediately and drink plenty of water.



according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 3 of 10

Call a physician immediately.

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

No data available

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

No data available

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

# Suitable extinguishing media

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

#### Unsuitable extinguishing media

no restriction

#### 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Hazardous combustion products

## 5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

Avoid contact with skin, eyes and clothes.

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

# **SECTION 6: Accidental release measures**

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

#### General advice

Do not breathe vapour/aerosol.

#### For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

**Emergency procedures** 

Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

#### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### Other information

Provide adequate ventilation.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 4 of 10

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

# 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation. Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

## Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink

#### Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

# 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

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

Store in a place accessible by authorized persons only.

#### Hints on joint storage

**TRGS 510** 

#### Further information on storage conditions

Store in a dry place.

#### 7.3. Specific end use(s)

Laboratory chemicals

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

# 8.2. Exposure 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.

Do not breathe gas/fumes/vapour/spray.

# Individual protection measures, such as personal protective equipment

# Eye/face protection

goggles



according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 5 of 10

Wear eye/face protection.

#### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

## Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

# Thermal hazards

No data available

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: clear
Odour: odourless
Odour threshold: No data available

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available No data available Flash point: Auto-ignition temperature: No data available Decomposition temperature: No data available No data available pH-Value: Viscosity / kinematic: No data available Water solubility: No data available

Solubility in other solvents

No data available

Dissolution rate:

No data available



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 6 of 10

Partition coefficient n-octanol/water: No data available Dispersion stability: No data available Vapour pressure: No data available Vapour pressure: No data available Density: 1,002 g/cm3 Relative density: No data available Bulk density: No data available No data available Relative vapour density: No data available Particle characteristics:

#### 9.2. Other information

# Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion:

No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

No data available

#### Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available

Solvent content:

O
Solid content:

Sublimation point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

# Further Information No data available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No data available

# 10.2. Chemical stability

No data available

# 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

#### **Further information**

No data available



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 7 of 10

#### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

#### **Acute toxicity**

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

#### **ATEmix** calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7758-01-2	potassium bromate				
	oral	LD50 157 mg/kg		Eisei Kaguku 1991, 37, (4), 258-265. (19	OECD Guideline 401

#### Irritation and corrosivity

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

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (potassium bromate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

#### STOT-single exposure

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

# STOT-repeated exposure

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

#### Aspiration hazard

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

#### Information on likely routes of exposure

There are no data available on the mixture itself.

#### Specific effects in experiment on an animal

There are no data available on the mixture itself.

#### Additional information on tests

There are no data available on the mixture itself.

# **Practical experience**

There are no data available on the mixture itself.

# 11.2. Information on other hazards

#### **Endocrine disrupting properties**

There are no data available on the mixture itself.

#### Other information

There are no data available on the mixture itself.

## **Further information**

There are no data available on the mixture itself.

# **SECTION 12: Ecological information**

## 12.1. Toxicity



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 8 of 10

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

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d] Species	Source	Method
7758-01-2	potassium bromate				
	Acute algae toxicity	ErC50 > 100 mg/l		, , ,	OECD Guideline 201

#### 12.2. Persistence and degradability

There are no data available on the mixture itself.

#### 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

#### 12.4. Mobility in soil

There are no data available on the mixture itself.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

Discharge into the environment must be avoided.

#### **Further information**

Do not allow to enter into surface water or drains.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

# Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Do not allow to enter into surface water or drains.

Send to a physico-chemical treatment facility under observation of official regulations.

#### Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

## Inland waterways transport (ADN)

······································	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.



according to Regulation (EC) No 1907/2006

# Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 9 of 10

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

# **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 75

Information according to Directive

Not subject to 2012/18/EU (SEVESO III)

2012/18/EU (SEVESO III):

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

# **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 12.

# Abbreviations and acronyms

Ox. Sol: Oxidising solid Acute Tox: Acute toxicity Carc: Carcinogenicity

# Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Carc. 1B; H350	Calculation method

# Relevant H and EUH statements (number and full text)

H271 May cause fire or explosion; strong oxidiser.

H301 Toxic if swallowed. H350 May cause cancer.

#### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Potassium bromate solution 0.02 mol KBrO3/I - 0.12 N solution Reag. Ph. Eur., chapter 4.2.2

Revision date: 28.02.2024 Product code: 25020 Page 10 of 10

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)