

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 1 of 10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Potassium bromate for analysis, ACS

REACH Registration Number: 01-2119518844-34-XXXX  
CAS No: 7758-01-2  
Index No: 035-003-00-6  
EC No: 231-829-8

**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  
Street: Stempelstraße 6  
Place: D-47167 Duisburg  
Telephone: 0203/5194-0  
E-mail: info@analytichem.de  
Contact person: Abteilung Produktsicherheit  
E-mail: produktsicherheit@analytichem.de  
Internet: www.analytichem.de  
Responsible Department: Abteilung Produktsicherheit

Telefax: 0203/5194-290  
Telephone: 0203/5194-107/117

**1.4. Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, 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**

No data available

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Ox. Sol. 1; H271  
Carc. 1B; H350  
Acute Tox. 3; H301

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

H271 May cause fire or explosion; strong oxidiser.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium bromate for analysis, ACS**

Revision date: 07.08.2023

Product code: 20674

Page 2 of 10

H301 Toxic if swallowed.  
H350 May cause cancer.

**Precautionary statements**

P201 Obtain special instructions before use.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P221 Take any precaution to avoid mixing with combustibles.  
P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

**2.3. Other hazards**

No data available

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

**3.1. Substances**

Sum formula: KBrO<sub>3</sub>  
Molecular weight: 167 g/mol

**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7758-01-2	potassium bromate			100 %
	231-829-8	035-003-00-6	01-2119518844-34-XXXX	
	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	100 %
	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**

No data available

**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**

Rinse immediately carefully and thoroughly with eye-bath or water.  
Consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 3 of 10

Call a physician immediately.

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

Cough, Gastrointestinal complaints, Vomiting  
Irritant, Unconsciousness, Respiratory complaints  
Headache, Cardiac arrhythmias, Blood pressure drop  
Dyspnoea, Spasms, Cyanosis (blue coloured blood)  
Methaemoglobinaemia

#### **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 solids  
Hazardous combustion products  
In case of fire may be liberated: Hydrogen bromide (HBr)  
Oxidising properties (Oxidising agent, strong)

#### **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**

Use water spray jet to protect personnel and to cool endangered containers.  
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

##### **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.  
Take up carefully when dry. Take up dust-free and set down dust-free.

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 4 of 10

#### Other information

- Provide adequate ventilation.
- 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

- Avoid exposure - obtain special instructions before use.
- Read label before use. Handle and open container with care.
- Avoid dust formation. Do not breathe dust.
- When using do not eat, drink, smoke, sniff. Keep container tightly closed.
- Use personal protection equipment. Use extractor hood (laboratory).
- Provide adequate ventilation. 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 place accessible by authorized persons only.
- storage temperature < +30°C

#### Hints on joint storage

- Keep away from combustible material.

#### Further information on storage conditions

- Store in a dry place.
- Keep container tightly closed.

### 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 5 of 10

Avoid dust formation. Do not breathe dust.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

goggles

Wear eye/face protection.

##### Hand protection

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

By long-term hand contact

Trade name/designation KCL 741 Dermatril® L

Recommended 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

Recommended 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](http://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: dust formation

Filtering device with filter or ventilator filtering device of type: B-(P3)

##### 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:	solid
Colour:	white
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	409-413 °C
Boiling point or initial boiling point and boiling range:	>425 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	>425 °C
pH-Value (at 20 °C):	5 - 9 (50 g/l)
Viscosity / kinematic:	No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 6 of 10

Water solubility: (at 20 °C)	~66 g/L
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	3,13 g/cm <sup>3</sup>
Relative density:	No data available
Bulk density:	~1400 kg/m <sup>3</sup>
Relative vapour density:	No data available
Particle characteristics:	No data available

#### 9.2. Other information

##### Information with regard to physical hazard classes

Explosive properties	
No data available	
Sustaining combustion:	No data available
Self-ignition temperature	
Gas:	No data available
Oxidizing properties	
No data available	

##### Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	0
Solid content:	100%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	No data available
Flow time:	No data available

##### Further Information

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Oxidising agent

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

arsenic, White/yellow phosphor  
Metal powder, SULPHUR  
Combustible substance, sulphuric acid  
Reducing agent, Acid

#### 10.4. Conditions to avoid

Heat

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 7 of 10

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

In case of fire may be liberated:

SECTION 5: Firefighting measures

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

Avoid exposure - obtain special instructions before use.

**Acute toxicity**

Toxic if swallowed.

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

**Irritation and corrosivity**

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

Causes mild skin irritation.

**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**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards****Endocrine disrupting properties**

No data available

**Other information**

Liver and kidney damage

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 8 of 10

Pulmonary oedema

**Further information**

Cough, Gastrointestinal complaints, Vomiting  
Irritant, Unconsciousness, Respiratory complaints  
Headache, Cardiac arrhythmias, Blood pressure drop  
Dyspnoea, Spasms, Cyanosis (blue coloured blood)  
Methaemoglobinaemia

**SECTION 12: Ecological information****12.1. Toxicity**

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 mg/l	> 100	72 h Desmodesmus subspicatus	Study report (2010)	OECD Guideline 201

**12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

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

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

No data available

**Further information**

Do not allow to enter into surface water or drains.  
Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Send to a hazardous waste incinerator facility under observation of official regulations.  
Do not mix with other wastes.  
Do not empty into drains.

**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****Land transport (ADR/RID)****14.1. UN number or ID number:**

UN 1484

**14.2. UN proper shipping name:**

POTASSIUM BROMATE



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium bromate for analysis, ACS**

Revision date: 07.08.2023

Product code: 20674

Page 9 of 10

**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1  
 Classification code: O2  
 Limited quantity: 1 kg  
 Excepted quantity: E2  
 Transport category: 2  
 Hazard No: 50  
 Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 1484  
**14.2. UN proper shipping name:** POTASSIUM BROMATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1  
 Classification code: O2  
 Limited quantity: 1 kg  
 Excepted quantity: E2

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1484  
**14.2. UN proper shipping name:** POTASSIUM BROMATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1  
 Special Provisions: -  
 Limited quantity: 1 kg  
 Excepted quantity: E2  
 EmS: F-H, S-Q

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1484  
**14.2. UN proper shipping name:** POTASSIUM BROMATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** II  
 Hazard label: 5.1  
 Limited quantity Passenger: 2.5 kg  
 Passenger LQ: Y544  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 558  
 IATA-max. quantity - Passenger: 5 kg  
 IATA-packing instructions - Cargo: 562  
 IATA-max. quantity - Cargo: 25 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**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 28, Entry 75

Information according to 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information: P8

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium bromate for analysis, ACS

Revision date: 07.08.2023

Product code: 20674

Page 10 of 10

#### 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

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