

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 1 of 8

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

Potassium perchlorate, 50 g

CAS No: 7778-74-7
Index No: 017-008-00-5
EC No: 231-912-9

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet**Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH
Street: Im Forstgarten 1
Place: D-66459 Kirkel
Internet: www.conatex.com

Supplier

Company name: Carbolution Chemicals GmbH
Street: Im Stadtwald, Gebäude A1.2
Place: D-66123 Saarbrücken
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232
e-mail: michael.bauer@carbolution-chemicals.de
Internet: www.carbolution-chemicals.de

1.4. Emergency telephone number: +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: O - Oxidizing, Xn - Harmful
R phrases:
Explosive when mixed with combustible material.
Harmful if swallowed.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Oxidising solid: Ox. Sol. 1
Acute toxicity: Acute Tox. 4
Hazard Statements:
May cause fire or explosion; strong oxidiser.
Harmful if swallowed.

2.2. Label elements**Hazardous components which must be listed on the label**
potassium perchlorate

Signal word: Danger
Pictograms: GHS03-GHS07

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 2 of 8



Hazard statements

H271 May cause fire or explosion; strong oxidiser.
H302 Harmful if swallowed.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: ClKO₄
Molecular weight: 138,55

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
231-912-9	potassium perchlorate	100 %
7778-74-7	O - Oxidizing, Xn - Harmful R9-22	
017-008-00-5	Ox. Sol. 1, Acute Tox. 4; H271 H302	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Change contaminated clothing.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.

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.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 3 of 8

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool place. Keep away from sources of ignition. - No smoking.

Advice on storage compatibility

Keep away from combustible material.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 4 of 8

be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	colourless
Odour:	No data available

Test method

pH-Value (at 25 °C):	6	13,9 g/l
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Changes in the physical state

Melting point:	400 °C
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Flash point:	No data available

Flammability

Solid:	No data available
Gas:	No data available

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	No data available

Auto-ignition temperature

Solid:	No data available
Gas:	No data available

Vapour pressure:	No data available
Vapour pressure:	No data available

Density:	2,52 g/cm ³
Water solubility: (at 20 °C)	13,9 g/L

Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	No data available
Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available

9.2. Other information

Solid content:	No data available
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 5 of 8

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

In case of impact or pressure influence: Explosion hazard. Remove all sources of ignition. Keep away from heat. Ignition hazard.

10.5. Incompatible materials

Keep away from: material, combustible.

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

Toxicological data are not available.

Acute toxicity

Acute toxicity, dermal.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
7778-74-7	potassium perchlorate				
	oral	ATE	500 mg/kg		

Irritation and corrosivity

No data available

Sensitising effects

No data available

Severe effects after repeated or prolonged exposure

No data available

Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

Specific effects in experiment on an animal

No data available

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Practical experience

Observations relevant to classification

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 6 of 8

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number:</u>	UN1489
<u>14.2. UN proper shipping name:</u>	POTASSIUM PERCHLORATE
<u>14.3. Transport hazard class(es):</u>	5.1
<u>14.4. Packing group:</u>	II
Hazard label:	5.1
Classification code:	O2
Limited quantity:	1 kg
Transport category:	2
Hazard No:	50
Tunnel restriction code:	E

Other applicable information (land transport)

E2

Inland waterways transport (ADN)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 7 of 8

14.1. UN number: UN1489
14.2. UN proper shipping name: POTASSIUM PERCHLORATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1
 Classification code: O2
 Limited quantity: 1 kg

Other applicable information (inland waterways transport)

E2

Marine transport (IMDG)

14.1. UN number: UN1489
14.2. UN proper shipping name: POTASSIUM PERCHLORATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1
 Special Provisions: -
 Limited quantity: 1 kg
 EmS: F-H, S-Q

Other applicable information (marine transport)

E2

Air transport (ICAO)

14.1. UN number: UN1489
14.2. UN proper shipping name: POTASSIUM PERCHLORATE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1
 Limited quantity Passenger: 2.5 kg
 IATA-packing instructions - Passenger: 558
 IATA-max. quantity - Passenger: 5 kg
 IATA-packing instructions - Cargo: 562
 IATA-max. quantity - Cargo: 25 kg

Other applicable information (air transport)

E2

: Y544

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

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Potassium perchlorate, 50 g

Print date: 14.04.2015

Product code: 9991524

Page 8 of 8

SECTION 16: Other information

Relevant R-phrases (Number and full text)

- 09 Explosive when mixed with combustible material.
- 22 Harmful if swallowed.

Relevant H- and EUH-phrases (Number and full text)

- H271 May cause fire or explosion; strong oxidiser.
- H302 Harmful if swallowed.