

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium peroxodisulfate, 100 g**

Print date: 14.04.2015

Product code: 9991528

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

Potassium peroxodisulfate, 100 g

CAS No: 7727-21-1  
Index No: 016-061-00-1  
EC No: 231-781-8

**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, Xi - Irritant

R phrases:

Contact with combustible material may cause fire.

Harmful if swallowed.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation and skin contact.

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

Hazard categories:

Oxidising solid: Ox. Sol. 3

Acute toxicity: Acute Tox. 4

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Skin corrosion/irritation: Skin Irrit. 2

Respiratory/skin sensitization: Resp. Sens. 1

Respiratory/skin sensitization: Skin Sens. 1

Hazard Statements:

May intensify fire; oxidiser.

Harmful if swallowed.

Causes serious eye irritation.

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May cause respiratory irritation.  
Causes skin irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.

#### 2.2. Label elements

##### Hazardous components which must be listed on the label

dipotassium peroxodisulphate, potassium persulphate

Signal word:

Danger

Pictograms:

GHS03-GHS07-GHS08



##### Hazard statements

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.

##### Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula:	K <sub>2</sub> O <sub>8</sub> S <sub>2</sub>
Molecular weight:	270,32

##### 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]	
231-781-8	dipotassium peroxodisulphate, potassium persulphate	100 %
7727-21-1	O - Oxidizing, Xn - Harmful, Xi - Irritant R8-22-36/37/38-42/43	
016-061-00-1	Ox. Sol. 3, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Resp. Sens. 1, Skin Sens. 1; H272 H302 H319 H335 H315 H334 H317	

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. In case of breathing difficulties administer oxygen. Medical treatment necessary.

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**After contact with skin**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Medical treatment necessary.

**After contact with eyes**

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently 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.

**5.3. Advice for firefighters**

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

**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**

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#### **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 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

	<b>Test method</b>
pH-Value (at 25 °C):	3,5 27 g/l

##### **Changes in the physical state**

Melting point:	100 °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:	2,477 g/cm <sup>3</sup>

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Water solubility: (at 20 °C)	27 g/L
Partition coefficient:	No data available
Viscosity / dynamic:	No data available
Viscosity / kinematic:	No data available
Flow time:	No data available
Vapour density:	9,33
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

#### 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
7727-21-1	dipotassium peroxodisulphate, potassium persulphate				
	oral	LD50	802 mg/kg	Ratte	

##### **Irritation and corrosivity**

Irritating to eyes. Following inhalation: Lung irritation. Coughing, shortage of breath. After skin contact: Irritant.

##### **Sensitising effects**

May cause sensitization by inhalation and skin contact.

##### **Severe effects after repeated or prolonged exposure**

No data available

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

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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

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
7727-21-1	dipotassium peroxodisulphate, potassium persulphate					
	Acute fish toxicity	LC50	100 mg/l	96 h	Poecilia reticulata	

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

No data available

#### 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

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

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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

Water (with cleaning agent). Completely emptied packages can be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number:** UN1492  
**14.2. UN proper shipping name:** POTASSIUM PERSULPHATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Classification code: O2  
 Limited quantity: 5 kg  
 Transport category: 3  
 Hazard No: 50  
 Tunnel restriction code: E

#### Other applicable information (land transport)

E1

#### Inland waterways transport (ADN)

**14.1. UN number:** UN1492  
**14.2. UN proper shipping name:** POTASSIUM PERSULPHATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Classification code: O2  
 Limited quantity: 5 kg

#### Other applicable information (inland waterways transport)

E1

#### Marine transport (IMDG)

**14.1. UN number:** UN1492  
**14.2. UN proper shipping name:** POTASSIUM PERSULPHATE  
**14.3. Transport hazard class(es):** 5.1  
**14.4. Packing group:** III  
 Hazard label: 5.1  
 Special Provisions: -  
 Limited quantity: 5 kg  
 EmS: F-A, S-Q

#### Other applicable information (marine transport)

E1

#### Air transport (ICAO)

**14.1. UN number:** UN1492  
**14.2. UN proper shipping name:** POTASSIUM PERSULPHATE  
**14.3. Transport hazard class(es):** 5.1

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<b>14.4. Packing group:</b>	III
Hazard label:	5.1
Limited quantity Passenger:	10 kg
IATA-packing instructions - Passenger:	559
IATA-max. quantity - Passenger:	25 kg
IATA-packing instructions - Cargo:	563
IATA-max. quantity - Cargo:	100 kg

**Other applicable information (air transport)**E1  
: Y546**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): 1 - slightly water contaminating

**SECTION 16: Other information****Relevant R-phrases (Number and full text)**

08	Contact with combustible material may cause fire.
22	Harmful if swallowed.
36/37/38	Irritating to eyes, respiratory system and skin.
42/43	May cause sensitisation by inhalation and skin contact.

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

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.