

**SAFETY DATA SHEET**  
POTASSIUM DICHROMATE 99.7%

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Compilation date: 22/03/2019

Revision No: 1

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** POTASSIUM DICHROMATE 99.7%

**CAS number:** 7778-50-9

**EINECS number:** 231-906-6

**Product code:** GPC8022

**Synonyms:** POTASSIUM BICHROMATE

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

**Use of substance / mixture:** PC21: Laboratory chemicals.

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

Select School Supplies  
The Old Granary  
Berghill House  
Oswestry  
SY11 4PD  
01691 770366  
sales@selectschoolsupplies.co.uk



**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CLP:** Ox. Sol. 2: H272; Acute Tox. 3: H301; STOT RE 1: H372; Acute Tox. 2: H330; Acute Tox. 4: H312; Skin Corr. 1B: H314; Resp. Sens. 1: H334; Skin Sens. 1: H317; Muta. 1B: H340; Carc. 1B: H350; Repr. 1B: H360FD; STOT SE 3: H335; Aquatic Chronic 1: H410; Aquatic Acute 1: H400

**Classification under CHIP:** T: R45; T: R46; T: R60; T: R61; O: R8; Xn: R21; T: R25; T+: R26; C: R34; Sens.: R42/43; T: R48/23; N: R50/53

**Most important adverse effects:** May intensify fire; oxidiser. Toxic if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause genetic defects. May cause cancer. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

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**2.2. Label elements**

**Label elements under CLP:**

**Hazard statements:** H272: May intensify fire; oxidiser.  
H301: Toxic if swallowed.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H317: May cause an allergic skin reaction.  
H330: Fatal if inhaled.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335: May cause respiratory irritation.  
H340: May cause genetic defects.  
H350: May cause cancer.  
H360FD: May damage fertility. May damage the unborn child.  
H372: Causes damage to organs through prolonged or repeated exposure.  
H410: Very toxic to aquatic life with long lasting effects.

**Signal words:** Danger

**Hazard pictograms:** GHS03: Flame over circle  
GHS06: Skull and crossbones  
GHS08: Health hazard  
GHS05: Corrosion  
GHS09: Environmental



**Precautionary statements:** P201: Obtain special instructions before use.  
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P220: Keep/Store away from clothing/combustible materials.  
P260: Do not breathe dust/fumes/gas/mist/vapours/spray.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P330: Rinse mouth.  
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing.  
Rinse skin with water/shower.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310: Immediately call a POISON CENTER or doctor.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P308+313: IF exposed or concerned: Get medical advice/attention.

P370+378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391: Collect spillage.

P403+233: Store in a well-ventilated place. Keep container tightly closed.

### 2.3. Other hazards

**Other hazards:** This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** POTASSIUM DICHROMATE 99.7%

**CAS number:** 7778-50-9

**EINECS number:** 231-906-6

**Contains:** Formula : Cr<sub>2</sub>K<sub>2</sub>O<sub>7</sub>

Molecular weight : 294.18 g/mol

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Take immediately to hospital. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

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

**Skin contact:** Severe burns may occur.

**Eye contact:** There may be severe pain.

**Ingestion:** No data available.

**Inhalation:** No data available.

**Delayed / immediate effects:** No data available.

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

**Immediate / special treatment:** No data available.

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**Section 5: Fire-fighting measures**

**5.1. Extinguishing media**

**Extinguishing media:** Dry chemical powder. Dry sand.

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

**Exposure hazards:** Not applicable.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

**Section 6: Accidental release measures**

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

**Personal precautions:** Wear respiratory protection. Ensure adequate ventilation. Evacuate the area immediately. Avoid dust formation. Avoid breathing vapours, mist or gas.  
For personal protection see section 8.

**6.2. Environmental precautions**

**Environmental precautions:** Do not discharge into drains or rivers.

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

**Clean-up procedures:** Sweep up and shovel. Keep in suitable, closed containers for disposal. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 13 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.  
Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Not applicable.

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

**Specific end use(s):** No special requirement.

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**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Workplace exposure limits:**

**Respirable dust**

| State | 8 hour TWA             | 15 min. STEL | 8 hour TWA | 15 min. STEL |
|-------|------------------------|--------------|------------|--------------|
| EU    | 0.05 mg/m <sup>3</sup> | -            | -          | -            |

**8.1. DNEL/PNEC Values**

**DNEL / PNEC** No data available.

**8.2. Exposure controls**

**Engineering measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

**Eye protection:** Face-shield. Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Environmental:** Do not let product enter drains. Prevent from entering in public sewers or the immediate environment.

**Section 9: Physical and chemical properties**

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

**State:** Crystalline

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**Melting point/range°C:** 398 °C - lit.

**Part.coeff. n-octanol/water:** log Pow: 5

**Relative density:** 2.680 g/cm<sup>3</sup>

**pH:** 3.5 - 5.0 at 29.4g/l

**9.2. Other information**

**Other information:** Not applicable.

**Section 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity:** No data available.

**10.2. Chemical stability**

**Chemical stability:** Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions:** No data available.

**10.4. Conditions to avoid**

**Conditions to avoid:** No data available.

**10.5. Incompatible materials**

**Materials to avoid:** Organic materials. Powdered metals Do not store near acids. Hydrazine.

**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes of potassium oxides. In combustion emits toxic fumes of chromium oxides.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Relevant hazards for substance:**

| Hazard                         | Route   | Basis              |
|--------------------------------|---------|--------------------|
| Acute toxicity (ac. tox. 4)    | DRM     | Based on test data |
| Acute toxicity (ac. tox. 3)    | ING     | Based on test data |
| Acute toxicity (ac. tox. 2)    | INH     | Based on test data |
| Skin corrosion/irritation      | DRM     | Based on test data |
| Serious eye damage/irritation  | OPT     | Based on test data |
| Respiratory/skin sensitisation | INH DRM | Based on test data |
| Germ cell mutagenicity         | --      | Based on test data |
| Carcinogenicity                | --      | Based on test data |
| Reproductive toxicity          | --      | Based on test data |
| STOT-single exposure           | INH     | Based on test data |

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|                        |   |                    |
|------------------------|---|--------------------|
| STOT-repeated exposure | - | Based on test data |
|------------------------|---|--------------------|

**Symptoms / routes of exposure**

**Skin contact:** Severe burns may occur.

**Eye contact:** There may be severe pain.

**Ingestion:** No data available.

**Inhalation:** No data available.

**Delayed / immediate effects:** No data available.

**Other information:** Not applicable.

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:**

| Species | Test     | Value | Units |
|---------|----------|-------|-------|
| FISH    | 96H LC50 | 0.131 | mg/l  |
| DAPHNIA | 48H EC50 | 0.62  | mg/l  |
| ALGAE   | 48H EC50 | 0.31  | mg/l  |

**12.2. Persistence and degradability**

**Persistence and degradability:** Not applicable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No data available.

**12.4. Mobility in soil**

**Mobility:** No data available.

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

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** Very toxic to aquatic organisms.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

**Recovery operations:** Not applicable.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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**Section 14: Transport information**

**14.1. UN number**

UN number: UN3086

**14.2. UN proper shipping name**

Shipping name: TOXIC SOLID, OXIDIZING, N.O.S.

**14.3. Transport hazard class(es)**

Transport class: 6.1 (5.1)

**14.4. Packing group**

Packing group: II

**14.5. Environmental hazards**

Environmentally hazardous: Yes

Marine pollutant: No

**14.6. Special precautions for user**

Tunnel code: C/E

Transport category: 2

**Section 15: Regulatory information**

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

**Specific regulations:** This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2. Chemical Safety Assessment**

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and 3:** H272: May intensify fire; oxidiser.  
H301: Toxic if swallowed.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H317: May cause an allergic skin reaction.  
H330: Fatal if inhaled.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335: May cause respiratory irritation.

[cont...]



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H340: May cause genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H350: May cause cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H360FD: May damage fertility. May damage the unborn child.

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H410: Very toxic to aquatic life with long lasting effects.

R8: Contact with combustible material may cause fire.

R21: Harmful in contact with skin.

R25: Toxic if swallowed.

R26: Very toxic by inhalation.

R34: Causes burns.

R42/43: May cause sensitisation by inhalation and skin contact.

R45: May cause cancer.

R46: May cause heritable genetic damage.

R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R60: May impair fertility.

R61: May cause harm to the unborn child.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.