

**POTASSIUM DICHROMATE 0,060 mol/l**

Date 15.6.2011

Previous date: -

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****1.1.1 Commercial Product Name**

POTASSIUM DICHROMATE 0,060 mol/l

**1.1.2 Product code**

FF2271 1L

**1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Recommended use**

MP0112 - Laboratory use: R&amp;D laboratory use

**1.3 Details of the supplier of the safety data sheet****1.3.1 Supplier**

Oy FF-Chemicals Ab

**P.O.Box**

Teollisuustie 4

**Postcode and post office**

FI-90830 Haukipudas

Finland

**Telephone**

+358 (0)8 5563 193

**Telefax**

+358 (0)8 5563 194

**Email**

ffc@ff-chemicals.fi

**1.4 Emergency telephone number****1.4.1 Telephone number, name and address**

Emergency telephone number 112

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****1272/2008 (CLP)**

Carc. 1B, H350

Muta. 1B, H340

Repr. 1B, H360

Acute Tox. 3, H331

Acute Tox. 4, H302

STOT RE 2, H373

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Resp. Sens. 1, H334

Skin Sens. 1, H317

Aquatic Chronic 3, H412

**67/548/EEC - 1999/45/EC**

T; R45-46-23-22-48/20-42/43-52/53

**2.2 Label elements**

Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

**1272/2008 (CLP)**

GHS08 - GHS07 - GHS06

Signal word

**Danger****Hazard Statements**

H350

May cause cancer &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;.

H340

May cause genetic defects &lt;state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard&gt;.

H360

May damage fertility. Suspected of damaging the unborn child.

H331

Toxic if inhaled.



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H302	Harmful if swallowed.
H373	May cause 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>.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

P201	Obtain special instructions before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P273	Avoid release to the environment.

**2.3 Other hazards****3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

<b>CAS/EC and Reg. number</b>	<b>Chemical name of the substance</b>	<b>Concentration</b>	<b>Classification</b>
7778-50-9	Potassium dichromate	1,8 %	O; R8;Carc. Cat. 2; R45;Muta. Cat. 2; R46;Repr. Cat. 2; R60-61;T+; R26;T; R25-48/23;Xn; R21;C; R34;R42/43;N; 50-53; Ox. Sol. 2; Carc. 1B; Muta. 1B; Repr. 1B; Acute Tox. 2 ; Acute Tox. 3 ; STOT RE 1; Acute Tox. 4 ; Skin Corr. 1B; Resp. Sens. 1; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

Move the victim to fresh air. Take off all contaminated clothing immediately. First aider needs to protect himself.

**4.1.2 Inhalation**

Move to fresh air in case of accidental inhalation of vapours. Consult a physician.

**4.1.3 Skin contact**

Flush skin with large amounts of water. If irritation develops and persists, get medical attention.

**4.1.4 Eye contact**

Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.

**4.1.5 Ingestion**

Rinse mouth. Call a physician.

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

Breathing difficulties

Cough

May cause nausea, abdominal spasms and irritation of the mucous membranes.

**4.3 Indication of immediate medical attention and special treatment needed**

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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**5. FIREFIGHTING MEASURES**

Not combustible.

**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**5.1.2 Extinguishing media which must not be used for safety reasons**

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

Burning produces irritant fumes.

**5.3 Advice for firefighters**

Protective equipment and precautions for firefighters

**5.4 Specific methods**

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**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid formation of aerosol. In the case of vapour formation use a respirator with an approved filter. Wear protective gloves/protective clothing/eye protection/face protection.

**6.2 Environmental precautions**

Do not allow material to contaminate ground water system.

**6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste.

**6.4 Reference to other sections**

8, 13.

**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**Avoid inhalation, ingestion and contact with skin and eyes. Do not enter confined spaces unless adequately ventilated. Handle with care. Toxic Material Causing Immediate and Serious Toxic Effects  
Pregnant women or women of child-bearing age should not be exposed to this product.**7.2 Conditions for safe storage, including any incompatibilities**

Store at room temperature in the original container.

**7.3 Specific end use(s)**

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.1 Threshold limits**7778-50-9 Potassium dichromate 0,05 mg/m<sup>3</sup> (8 h)  
CrO<sub>4</sub>**8.1.2 Other information on limit values**

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**8.1.3 Limit values in other countries**

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**8.1.4 DNELs**

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**8.1.5 PNECs**

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**8.2 Exposure controls****8.2.1 Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse.

**8.2.2 Individual protection measures****8.2.2.1 Respiratory protection**

Required, if fumes/vapours are generated

**8.2.2.2 Hand protection**

Protective gloves complying with EN 374.

**8.2.2.3 Eye/face protection**

Safety Glasses.

**8.2.2.4 Skin protection**

Lab coat.

**8.2.3 Environmental exposure controls**

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**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Important Health Safety and Environmental Information****9.1.1 Appearance**

Liquid

**9.1.2 Odour**

no data available

**9.1.3 Odour threshold**

no data available

**9.1.4 pH**

no data available

**9.1.5 Melting point/freezing point**

no data available

**9.1.6 Initial boiling point and boiling range**

no data available

**9.1.7 Flash point**

not significant

**9.1.8 Evaporation rate**

no data available

**9.1.9 Flammability (solid, gas)**

not significant

**9.1.10 Explosive properties****9.1.10.1 Lower explosion limit**

not significant

**9.1.10.2 Upper explosion limit**

negligible

**9.1.11 Vapour pressure**

no data available

**9.1.12 Vapour density**

no data available

**9.1.13 Relative density**

no data available

**9.1.14 Solubility(ies)****9.1.14.1 Water solubility**

soluble

**9.1.15 Partition coefficient: n-octanol/water**

no data available

**9.1.16 Auto-ignition temperature**

negligible

**9.1.17 Decomposition temperature**

no data available

**9.1.18 Viscosity**

no data available

**9.1.19 Explosive properties**

negligible

**9.1.20 Oxidising properties**

no data available

**9.2 Other information**

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**10. STABILITY AND REACTIVITY****10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

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- 10.2 Chemical stability**  
The product is chemically stable.
- 10.3 Possibility of hazardous reactions**  
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- 10.4 Conditions to avoid**  
To avoid thermal decomposition, do not overheat.
- 10.5 Incompatible materials**  
No information available.
- 10.6 Hazardous decomposition products**  
No information available.

**11. TOXICOLOGICAL INFORMATION**

- 11.1 Information on toxicological effects**
- 11.1.1 Acute toxicity**  
Component 100 %  $\text{Cr}_2\text{K}_2\text{O}_7$ :  
LD50/oral/rat = 25 mg/kg RTECS  
LC50/inhalation/4h/rat = 0,094 mg/l IUCLID  
LD50/dermal/rat = 1170 mg/kg IUCLID  
Toxic if inhaled. Harmful if swallowed.
- 11.1.2 Irritation and corrosion**  
Irritating to eyes and skin.
- 11.1.3 Sensitisation**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
- 11.1.4 Subacute, subchronic and prolonged toxicity**  
May cause cancer. May cause heritable genetic damage. May damage the unborn child. Suspected of damaging fertility.
- 11.1.5 STOT-single exposure**  
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- 11.1.6 STOT-repeated exposure**  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- 11.1.7 Aspiration hazard**  
No aspiration toxicity classification
- 11.1.8 Other information on acute toxicity**  
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**12. ECOLOGICAL INFORMATION**

- 12.1 Toxicity**
- 12.1.1 Aquatic toxicity**  
Harmful to aquatic life with long lasting effects. The product should not be allowed to enter drains, water courses or the soil.
- 12.1.2 Toxicity to other organisms**  
No information available.
- 12.2 Persistence and degradability**
- 12.2.1 Biodegradation**  
No information available.
- 12.2.2 Chemical degradation**  
No information available.
- 12.3 Bioaccumulative potential**  
No information available.

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- 12.4 Mobility in soil**  
Highly mobile in soils
- 12.5 Results of PBT and vPvB assessment**  
No information available.
- 12.6 Other adverse effects**  
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**13. DISPOSAL CONSIDERATIONS**

The product has to be disposed of as laboratory chemical in accordance with local regulations.

- 13.1 Waste treatment methods**  
160506 - laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals

**14. TRANSPORT INFORMATION**

	<b>Land transport ADR/RID</b>	<b>Sea transport IMDG/IMO</b>	<b>Air transport ICAO/IATA</b>
<b>14.1 UN number</b>	UN 3287	UN 3287	
<b>14.2 UN proper shipping name</b>	TOXIC LIQUID, INORGANIC, N.O.S. (Potassium dichromate)	TOXIC LIQUID, INORGANIC, N.O.S. (Potassium dichromate)	
<b>14.3 Transport hazard class(es)</b>	6,1	6,1	
<b>14.4 Packing group</b>	III	III	
<b>14.5 Environmental hazards</b>			
<b>Other information</b>			

- 14.6 Special precautions for users**
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**15. REGULATORY INFORMATION**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, Annex VI, Table 3.1.
- 15.2 Chemical safety assessment**  
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**16. OTHER INFORMATION**

- 16.1 Additions, Deletions, Revisions**  
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- 16.3 Key literature references and sources for data**  
This product is a mixture. Health hazard information is based on its components.

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**16.4 Classification procedure**

Classification according to Regulation (EU) 1272/2008 with the correlation table 67/548/EEC or 1999/45/EC (Annex VII of CLP)

**16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**

R8	Contact with combustible material may cause fire.
R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R23	Toxic by inhalation.
R25	Toxic if swallowed.
R26	Very toxic by inhalation.
R34	Causes burns.
R42/43	May cause sensitization by inhalation and skin contact.
R45	May cause cancer.
R46	May cause heritable genetic damage.
R48/20	Also harmful: danger of serious damage to health by prolonged exposure through inhalation.
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
R52/53	Harmful 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.

**16.6 Training advice**

Provide adequate information, instruction and training for operators.

**16.7 Recommended restrictions**

Pregnant women or women of child-bearing age should not be exposed to this product. Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

**16.8 Additional information available from:**

Oy FF-Chemicals Ab, puh. 08 5563 193  
ffc@ff-chemicals.fi

The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.