

## 1. Identification of the substance / mixture and of the company / undertaking

### 1.1 Product identifier

Product name: Potassium chromate  
CAS-No.: 7789-00-6  
EC-No.: 232-140-5

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

Identified use: Laboratory chemical

### 1.3 Details of the supplier of the safety data sheet

Company: NETZSCH-Gerätebau GmbH  
Wittelsbacherstraße 42  
95100 Selb / Germany

Customer service Phone: +49 9287 881-555

**1.4 Emergency Phone: +49 9287 881-174 (during office hours)**

Fax: +49 9287 881-505

E-mail Address: service@ngb.netzsch.com

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Muta. 1B	H340 May cause genetic defects.
Carc. 1B	H350i May cause cancer by inhalation.
Aquatic Acute 1	H400 (M=10) Very toxic to aquatic life.
Aquatic Chronic 1	H410 (M=10) Very toxic to aquatic life with long lasting effects.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms:



Signalword:

Danger

Hazard statements:	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H340 May cause genetic defects. H350i May cause cancer by inhalation. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements:	P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/fumes/gas/mist/vapours/spray. P281 Use personal protective equipment as required. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up.
Additional information:	Restricted to professional users.

### 2.3 Other hazards

All chemicals are potentially dangerous.  
They are therefor only be handled by specially trained personnel with the necessary care.

#### Results of PBT- und vPvB assessment

PBT:	Not applicable.
vPvB:	Not applicable.

## 3. Composition / information on ingredients

### 3.1 Chemical characterization:

#### Substances

CAS-No. Description: 7789-00-6 potassium chromate

#### Identification number(s):

EC number:	232-140-5
Formula:	$K_2CrO_4$
Molar mass [g/mol]:	194.2

## 4. First aid measures

### 4.1 Description of first aid measures

General information:	Consult a physician. Show this safety data sheet to the doctor in attendance. Remove any clothing soiled by the product. First Aider: Pay attention to self-protection!
After inhalation:	Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Immediately rinse with water. Seek medical treatment in case of complaints.
After eye contact:	Rinse opened eye for 10 minutes under running water. Then consult a doctor.
After swallowing:	Rinse out mouth and drink a glass of water. Do not induce vomiting. Call for a doctor immediately.

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

Allergic reactions: We have no description of any toxic symptoms.  
Hazards Danger of pneumonia.

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

No further relevant information available.

## 5. Fire-Fighting measures

### 5.1 Extinguishing agents

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. CO<sub>2</sub> powder, foam or water spray.

For safety reasons unsuitable extinguishing agents: Do not use water jet.

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

In the event of fire development of hazardous combustion gases or vapours possible.

**In case of fire, the following can be released:**

Potassium oxides, chrome oxides

### 5.3 Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.  
Wear fully protective suit.

Additional information: Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.  
Prevent fire-fighting water from entering surface water or groundwater.

## 6. Accidental release measures

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

Avoid formation of dust.  
Do not breathe dust.  
Avoid contact with the eyes and skin.  
Keep people at a distance and stay on the windward side.  
Ensure adequate ventilation.  
Wear personal protective equipment.  
Evacuate the danger area, observe emergency procedures, consult an expert.

### 6.2 Environmental precautions

Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ground water or penetrate the soil.  
Keep contaminated washing water and dispose of appropriately.

### 6.3 Methods and material for containment and cleaning up

Pick up mechanically (dust free)  
Dispose of the material collected according to regulations.  
Ensure adequate ventilation.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.  
Handle and open container with care.  
Avoid contact with skin and eyes.  
Handling corresponding to laboratory safety guidelines.

#### Information about fire and explosion protection:

Keep respiratory protective device available.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be safe storage,  
including any incompatibilities: Prevent penetration into the ground.  
Well-ventilated place.

Information about storage in one  
common storage facility: Store away from foodstuffs.

Further information about  
storage conditions: Store in dry conditions.  
Keep container tightly sealed.

Recommended storage  
temperature: 15-25 °C  
Storage class (TRGS 510): non- flammable solids  
Acute toxic category 3/toxic or chronically acting hazardous material.

### 7.3 Specific end use(s)

No further relevant information available.

## 8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7.

### 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: 7789-00-6 potassium chromate

WEL (Great Britain)	Long-term value: 0.05 mg/m <sup>3</sup> as Cr; Carc, Sen
BMGV (Great Britain)	10 µmol/mol creatinine Medium: urine Sampling time: post shift Parameter: chromium

Additional information: The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Personal protective equipment:

General protective and hygienic measures: Do not breathe dust.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Avoid contact with the eyes and skin.

Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection: Filter P3 (colour code: white)  
Required when dusts are generated.

Protection of hands: Protective gloves:  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.  
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
Material: Nitrile rubber

Eye protection: Tightly sealed goggles.

Body protection: Protective work clothing.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General Information

<u>Appearance</u>	
Form:	Powder
Colour:	Yellow
Odour:	Odourless
Odour threshold:	Not determined.
pH-value (50 g/l) at 20 °C:	8,5 - 10,0
<u>Change in condition</u>	
Melting point / Melting range:	985 °C
Boiling point / Boiling range:	1000 °C
Flash point:	Not applicable.
Flammability (solid, gaseous):	No data available.
Ignition temperature:	No information available
Decomposition temperature:	Not determined.
Self-igniting:	Not determined.
Danger of explosion:	Product does not present an explosion hazard.
<u>Explosion limits</u>	
Lower:	Not determined.
Upper:	Not determined.
Oxidizing properties:	No information available.
Vapour pressure at 20°C:	No data available.
Density at 20°C:	2.73 g/cm <sup>3</sup>
Bulk density at 20 °C:	~1450 kg/m <sup>3</sup>
Relative density:	Not determined.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Solubility in / Miscibility with water at 20°C:	637 g/l
Partition coefficient (n-octanol / water):	Not determined.
<u>Viscosity</u>	
Dynamic:	Not applicable.
Kinematic:	Not applicable.

### 9.2 Other information

No further relevant information available.

## 10. Stability and reactivity

### 10.1 Reactivity

See section 10.3

### 10.2 Chemical stability

#### Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

### 10.3 Possibility of hazardous reactions

#### Strong reaction possible with:

chlorates

Reducing agents

#### Risk of ignition or formation of inflammable gases or vapors with:

glycerol

organic combustible substances

#### Exothermic reaction with:

Sulphides

#### Danger of explosion with:

hydrazine and derivatives

hydroxylamine

oxidisable substances

### 10.4 Conditions to avoid

No Information available.

### 10.5 Incompatible materials

Organic materials , powdered metals , strong oxidizing agents.

### 10.6 Hazardous decomposition products

In case of fire: see item 5.

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD / LC50 values relevant  
for classification:

Oral | LD<sub>50</sub> | 180 mg/kg (mouse)

#### Potential health effects

Skin: Irritant to skin and mucous membranes.

Eyes: Irritating effect.

Inhalation: Irritations in the respiratory tract, coughing, dyspnoea.

Sensitization: Sensitisation possible through skin contact.

#### CMR effects

Muta. 1B, Carc. 1B

Germ cell mutagenicity: May cause genetic defects.

Carcinogenicity: May cause cancer by inhalation.

Reproductive toxicity: No Information available.

**Aspiration hazard:**

No Information available.

**Specific target organ toxicity – single exposure:**

May cause respiratory irritation.

**Specific target organ toxicity – repeated exposure:**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Additional toxicological information:**

We have no description of any toxic symptoms.

**Further information:**

Further hazardous properties cannot be excluded.

The product should be handled with the usual care as necessary for chemicals.

**12. Ecological information****12.1 Toxicity****Aquatic toxicity**

Fish toxicity		Daphnia toxicity	
LC <sub>50</sub>	39.8 mg/l/96 h (Pimephales promelas) (ECOTOX)	EC50	0.02 mg/l/48 h (Daphnia magna) (ECOTOX)

**12.2 Persistence and degradability**

Persistence: No data available.

Degradability: Methods for the determination of biodegradability are not applicable to inorganic substances.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**Ecotoxicological effects**

Remark: Very toxic for fish.  
Do not allow to enter waters, waste water, or soil!  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Also poisonous for fish and plankton in water bodies.

**12.5 Results of PBT and vPvB assessment**

PBT: No data available.

vPvB: No data available.

**12.6 Other adverse effects**

No further relevant information available.



## 13. Disposal considerations

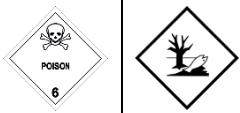
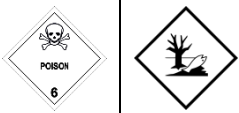

### 13.1 Waste treatment methods

Recommendation: Dispose of residual amounts and non-reusable solutions in accordance with local legal regulations. Waste code must be classified as hazardous.

### Uncleaned packaging

Recommendation: Disposal same as for unused product.

## 14. Transport Information

	ADR	IMDG	IATA
<b>14.1 UN-Number</b>	UN3288	UN3288	UN3288
<b>14.2 UN proper shipping name</b>	3288 TOXIC SOLID, INORGANIC, N.O.S. (potassium chromate), ENVIRONMENTALLY HAZARDOUS	TOXIC SOLID, INORGANIC, N.O.S. (potassium chromate), MARINE POLLUTANT	TOXIC SOLID, INORGANIC, N.O.S. (potassium chromate)
<b>14.3 Transport hazard class(es) / -label</b>			
<b>14.4 Packing group:</b>	III	III	III
Transport hazard class(es):	6.1 Toxic substances.	6.1 Toxic substances.	6.1 Toxic substances.
Label:	6.1	6.1	6.1
Danger symbol:			
<b>14.5 Environmental hazards:</b>	Yes	Yes	No

### 14.6 Special precautions for user

Warning: Toxic substances.

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

## **15. Regulatory information**

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

#### **National regulations:**

Information about limitation of use: Employment restrictions concerning pregnant and lactating women must be observed.

Employment restrictions concerning juveniles must be observed.

Waterhazard class: Water hazard class 3 (Assessment by list): extremely hazardous for water.

### **15.2 Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

## **16. Other Information**

#### **Guarantee**

This information has been compiled to the best of our knowledge; however, we make no claim as to its completeness and it is meant to serve only as a guideline. NETZSCH-Gerätebau GmbH disclaims any liability for damages which may occur in handling or in contact with these chemicals.

#### **Disclaimer**

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