# POTASSIUM PERMANGANATE

ICSC: 0672 Permanganic acid potassium salt November 2016

CAS #: 7722-64-7 UN #: 1490

EC Number: 231-760-3

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Not combustible but enhances combustion of other substances. Gives off irritating or toxic fumes (or gases) in a fire. Risk of fire and explosion on contact with combustible substances or reducing agents.	NO contact with combustible substances.	In case of fire in the surroundings, use appropriate extinguishing media.

PREVENT DISPERSION OF DUST! STRICT HYGIENE! IN ALL CASES CONSULT A DOCTOR!				
	SYMPTOMS	PREVENTION	FIRST AID	
Inhalation	Burning sensation. Cough. Sore throat. Shortness of breath. Laboured breathing. Symptoms may be delayed.	Avoid inhalation of dust. Use local exhaust or breathing protection.	Fresh air. Half-upright position. Artificial respiration may be needed. Refer immediately for medical attention.	
Skin	Redness. Skin burns. Pain.	Protective gloves. Protective clothing.	Wear protective gloves when administering first aid. First rinse with plenty of water for at least 15 minutes, then remove contaminated clothes and rinse again. Refer for medical attention.	
Eyes	Redness. Pain. Severe burns.	Wear face shield or eye protection in combination with breathing protection.	Rinse with plenty of water for several minutes (remove contact lenses if easily possible). Refer immediately for medical attention.	
Ingestion	Burning sensation. Abdominal pain. Diarrhoea. Nausea. Vomiting. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. If within a few minutes after ingestion, one small glass of water may be given to drink. Do NOT induce vomiting. Refer immediately for medical attention.	

# SPILLAGE DISPOSAL **CLASSIFICATION & LABELLING** Personal protection: chemical protection suit including self-**According to UN GHS Criteria** contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations. Do NOT absorb in saw-dust or other combustible absorbents. **STORAGE** Separated from combustible substances, reducing agents and powdered metals. Well closed. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access. **PACKAGING DANGER** Marine pollutant. May intensify fire; oxidizer Harmful if swallowed

Causes severe skin burns and eye damage Suspected of damaging fertility or the unborn child Very toxic to aquatic life

Transportation UN Classification

UN Hazard Class: 5.1; UN Pack Group: II



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### POTASSIUM PERMANGANATE

# ICSC: 0672

# PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance DARK PURPLE CRYSTALS.

**Physical dangers** 

Chemical dangers

Decomposes on heating. This produces toxic gases and irritating fumes. The substance is a strong oxidant. It reacts with combustible and reducing materials. This generates fire and explosion hazard. Reacts violently with powdered metals. This generates fire hazard.

Formula: KMnO<sub>4</sub>
Molecular mass: 158
Decomposes at 240°C
Density: 2.7 g/cm³

Solubility in water, g/100ml at 20°C: 6.4 (moderate)

Vapour pressure at 20°C: negligible

Octanol/water partition coefficient as log Pow: 1.73 (calculated)

## **EXPOSURE & HEALTH EFFECTS**

### Routes of exposure

Serious local effects by all routes of exposure.

# Effects of short-term exposure

The substance is corrosive to the eyes, skin and respiratory tract. Corrosive on ingestion. Inhalation of dust may cause lung oedema, but only after initial corrosive effects on eyes and/or airways have become manifest. The effects may be delayed. Medical observation is indicated.

#### Inhalation risk

A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

### Effects of long-term or repeated exposure

The substance may have effects on the lungs. This may result in bronchitis and pneumonia. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

## **OCCUPATIONAL EXPOSURE LIMITS**

TLV: (as Mn): 0.2 mg/m<sup>3</sup>, as TWA.

EU-OEL: (as Mn, inhalable fraction): 0.2 mg/m<sup>3</sup> as TWA. EU-OEL: (as Mn, respirable fraction): 0.05 mg/m<sup>3</sup> as TWA.

 $MAK: (as\ Mn,\ inhalable\ fraction):\ 0.2\ mg/m^3;\ (as\ Mn,\ respirable\ fraction):\ 0.02\ mg/m^3;\ peak\ limitation\ category:\ II(1);\ pregnancy$ 

risk group: C; (DFG 2016)

#### **ENVIRONMENT**

The substance is very toxic to aquatic organisms.

### **NOTES**

Rinse contaminated clothing with plenty of water because of fire hazard.

# **ADDITIONAL INFORMATION**

#### **EC Classification**

Symbol: O, Xn, N; R: 8-22-50/53; S: (2)-60-61

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