

# SODIUM PERCHLORATE

0715

October 1999

CAS No: 7601-89-0  
RTECS No: SC9800000  
UN No: 1502  
EC No: 017-010-00-6

Sodium perchlorate  
Perchloric acid, sodium salt  
Inenat  
NaClO<sub>4</sub>  
Molecular mass: 122.4

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Not combustible but enhances combustion of other substances. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with flammable substances.	In case of fire in the surroundings: water in large amounts, water spray.
<b>EXPLOSION</b>		Do NOT expose to friction or shock.	In case of fire: keep drums, etc., cool by spraying with water. Combat fire from a sheltered position.
<b>EXPOSURE</b>		<b>PREVENT DISPERSION OF DUST!</b>	
<b>Inhalation</b>	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap. >
<b>Eyes</b>	Redness. Pain.	Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
<b>Ingestion</b>		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.
<b>SPILLAGE DISPOSAL</b>	<b>PACKAGING &amp; LABELLING</b>		
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water. Do NOT absorb in saw-dust or other combustible absorbents. Personal protection: P2 filter respirator for harmful particles.	O Symbol Xn Symbol R: 9-22 S: (2-)13-22-27 UN Hazard Class: 5.1 UN Pack Group: II		
<b>EMERGENCY RESPONSE</b>	<b>SAFE STORAGE</b>		
Transport Emergency Card: TEC (R)-51S1502 or 51GO2-I+II+III NFPA Code: H 2; F 0; R 2; ox	Separated from combustible and reducing substances. See Chemical Dangers. Well closed.		

**IPCS**

International  
Programme on  
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©  
IPCS 2005

SEE IMPORTANT INFORMATION ON THE BACK.

### IMPORTANT DATA

**Physical State; Appearance**

WHITE HYGROSCOPIC CRYSTALS OR POWDER.

**Chemical dangers**

The substance decomposes on heating producing toxic fumes (chlorine, chloroxides). The substance is a strong oxidant and reacts with combustible and reducing materials causing fire and explosion hazard.

**Occupational exposure limits**

TLV not established.

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

**Inhalation risk**

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

**Effects of short-term exposure**

The substance irritates the eyes, the skin and the respiratory tract.

**Effects of long-term or repeated exposure**

The substance may have effects on the blood, resulting in formation of methaemoglobin. (See Notes).

### PHYSICAL PROPERTIES

Melting point (decomposes): 482°C  
Density: 2.0 g/cm<sup>3</sup>

Solubility in water: very good

### ENVIRONMENTAL DATA

### NOTES

Other melting points: sodium perchlorate monohydrate: 130°C.

Will turn shock-sensitive if contaminated with organic substances.

Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

Rinse contaminated clothes (fire hazard) with plenty of water.

The recommendations on this Card also apply to Sodium perchlorate monohydrate.

Depending on the degree of exposure, periodic medical examination is suggested.

Card has been partly updated in October 2005. See section Emergency Response.

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information