

SODIUM CHLORATE

1117
October 1999CAS No: 7775-09-9
RTECS No: FO0525000
UN No: 1495
EC No: 017-005-00-9Chloric acid, sodium salt
NaClO₃
Molecular mass: 106.44

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	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 contact with flammable substances. NO contact with combustibles, reducing agents, and organic materials.	Water in large amounts.
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE		PREVENT DISPERSION OF DUST!	
Inhalation	Cough. Sore throat. Blue lips or finger nails. Blue skin. Confusion. Convulsions. Dizziness. Headache. Nausea. Unconsciousness.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
Eyes	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.
Ingestion	Abdominal pain. Diarrhoea. Shortness of breath. Vomiting. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT absorb in saw-dust or other combustible absorbents. Personal protection: P2 filter respirator for harmful particles.	O Symbol Xn Symbol N Symbol R: 9-22-51/53 S: (2-)13-17-46-61 UN Hazard Class: 5.1 UN Pack Group: II

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-51S1495 NFPA Code: H 1; F 0; R 2; OX	Separated from combustible and reducing substances, and incompatible materials. See Chemical Dangers.

IMPORTANT DATA

Physical State; Appearance

ODOURLESS, COLOURLESS CRYSTALS OR WHITE GRANULES.

Chemical dangers

The substance decomposes on heating above 300/C producing oxygen, which increases fire hazard, and toxic fumes (chlorine). The substance is a strong oxidant and reacts violently with combustible and reducing materials, causing fire and explosion hazard. Reacts with many organic materials to form shock-sensitive mixtures, causing explosion hazard. Attacks zinc and steel.

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 on spraying or when dispersed, especially if powdered.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the blood, resulting in formation of methaemoglobin, and on kidneys, resulting in kidney impairment. The effects may be delayed. Medical observation is indicated. See Notes.

PHYSICAL PROPERTIES

Decomposes below boiling point at ca. 300/C
Melting point: 248/C

Density: 2.5 g/cm³
Solubility in water, g/100 ml at 20/C: 100

ENVIRONMENTAL DATA

NOTES

The substance is entirely decomposed at temperature higher than 300/C.
Will turn shock-sensitive if contaminated with organic materials.
Marketed formulations contain a flame retardant.
Depending on the degree of exposure, periodic medical examination is suggested.
Rinse contaminated clothes (fire hazard) with plenty of water.
Dervan, Defol, Chlorax and Atlacide are trade names.
Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, 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