

SODIUM CYANIDE

1118
May 2003

CAS No: 143-33-9 Hydrocyanic acid, sodium salt
RTECS No: VZ7525000 NaCN
UN No: 1689 Molecular mass: 49.01
EC No: 006-007-00-5

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible but forms flammable gas on contact with water or damp air. Gives off irritating or toxic fumes (or gases) in a fire.		NO hydrous agents. NO water. NO carbon dioxide. In case of fire in the surroundings: foam and powder.
EXPLOSION			In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water.

EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Sore throat. Headache. Confusion. Weakness. Shortness of breath. Convulsions. Unconsciousness.	Local exhaust or breathing protection.	Fresh air, rest. No mouth-to-mouth artificial respiration. Administer oxygen by trained personnel. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness. Pain. (Further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	Redness. Pain. (Further see Inhalation).	Safety goggles face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Burning sensation. Nausea. Vomiting. Diarrhoea. (See Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Wear protective gloves when inducing vomiting. No mouth-to-mouth artificial respiration. Administer oxygen by trained personnel. Refer for medical attention. See Notes.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Ventilation. Sweep spilled substance into dry, sealable and labelled containers. Cautiously neutralize remainder with sodium hypochlorite solution. Then wash away with plenty of water. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.	T+ Symbol N Symbol R: 26/27/28-32-50/53 S: (1/2-)7-28-29-45-60-61 Note: A UN Hazard Class: 6.1 UN Pack Group: I Airtight. Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Marine pollutant.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-61S1689 NFPA Code: H3; F0; R0	Separated from strong oxidants, acids, food and feedstuffs, carbon dioxide, water or products containing water. Dry. Well closed. Keep in a well-ventilated room.

IMPORTANT DATA

Physical State; Appearance

WHITE, HYGROSCOPIC CRYSTALLINE POWDER, WITH CHARACTERISTIC ODOUR. ODOURLESS WHEN DRY.

Chemical dangers

The substance decomposes rapidly on contact with acids, and slowly on contact with water, moisture or carbon dioxide producing hydrogen cyanide (see ICSC 0492). The solution in water is a medium strong base.

Occupational exposure limits

TLV: (as CN) 5 mg/m³; (Ceiling value); (skin); (ACGIH 2003).
MAK: (Inhalable fraction) 2 mg/m³; Peak limitation category: II(1); skin absorption (H); Pregnancy risk group: C; (DFG 2004).

Routes of exposure

The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Inhalation risk

A harmful concentration of airborne particles can be reached quickly when dispersed.

Effects of short-term exposure

The substance is severely irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the cellular respiration, resulting in convulsions and unconsciousness. Exposure may result in death. Medical observation is indicated. See Notes.

Effects of long-term or repeated exposure

The substance may have effects on the thyroid.

PHYSICAL PROPERTIES

Boiling point: 1496/C
Melting point: 563.7/C

Density: 1.6 g/cm³
Solubility in water, g/100 ml at 20/C: 58

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms.

NOTES

The occupational exposure limit value should not be exceeded during any part of the working exposure. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. Do NOT take working clothes home. Depending on the degree of exposure, periodic medical examination is suggested. Never work alone in an area if hydrocyanic acid exposure is possible. Card has been partly updated in April 2005. See section Occupational Exposure Limits.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible