

2,3,4,6-TETRACHLOROPHENOL

1089

October 2005

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2,4,5,6-Tetrachlorophenol
Phenol, 2,3,4,6-tetrachloro-
C₆H₂Cl₄O
Molecular mass: 231.9

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Water spray. Alcohol-resistant foam. Dry powder. Carbon dioxide.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
Inhalation	Cough. Shortness of breath. Convulsions.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Eyes	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Diarrhoea. Headache. Dizziness. Vomiting. Weakness. Convulsions. Muscular spasms. Increased body temperature and sweating (see Notes).	Do not eat, drink, or smoke during work. Wash hands before eating.	Give a slurry of activated charcoal in water to drink. Refer for medical attention.

SPILLAGE DISPOSAL

Personal protection: P2 filter respirator for harmful particles. Chemical protection suit. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers.

PACKAGING & LABELLING

T Symbol
N Symbol
R: 25-36/38-50/53
S: (1/2-)26-28-37-45-60-61
UN Hazard Class: 6.1
UN Pack Group: III

Do not transport with food and feedstuffs.

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-61S2020 or 61GT2-III

SAFE STORAGE

Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Store in an area without drain or sewer access.

IPCS

International
Programme on
Chemical Safety



Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission ©
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SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance

BROWN SOLID IN VARIOUS FORMS, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on heating producing corrosive fumes including hydrogen chloride.

Occupational exposure limits

TLV not established.
MAK not established.

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 irritating to the eyes, the skin and the respiratory tract. See Notes.

Effects of long-term or repeated exposure

The substance may have effects on the liver. The substance may have effects on the skin, resulting in chloracne. (See Notes.)

PHYSICAL PROPERTIES

Melting point: 70/C

Density: 1.8 g/cm³

Solubility in water, g/100 ml at 20/C: 0.1 (very poor)

Flash point: 100/C

Octanol/water partition coefficient as log Pow: 4.45

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

NOTES

2,3,4,6-Tetrachlorophenol is a polychlorophenol which, as a group, has been classified by IARC (1999) as possibly carcinogenic to humans, but the data on this specific substance are inconclusive. No data are available on this isomer but a mixture of tetrachlorophenols may cause irritation of the skin, eyes and respiratory tract. These substances may cause acute metabolic effects resulting in damage in several organs notably in central nervous system. Some technical products may contain highly toxic impurities including polychlorinated dibenzo-p-dioxins and -furans.

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

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