

化 学 品 安 全 技 术 说 明 书

填表时间 2020-03-09

打印时间 2026-02-13

MSDS标题

P-NITROPHENOL MSDS报告

产品标题

对硝基酚;4-硝基苯酚;4-硝基酚

CAS号

100-02-7

化学品及企业标识

PRODUCT NAME

P-NITROPHENOL

NFPA

Flammability	1
Toxicity	2
Body Contact	2
Reactivity	2
Chronic	2

SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4

PRODUCT USE

Used in manufacturer of many important compounds; as indicator in 0.1% alcohol solution, pH 5.6 colourless, 7.6 yellow; production of parathion and fungicide for leather.
Intermediate

SYNONYMS

C6-H5-N-O3, C6-H5-N-O3, O2NC6H4OH, para-nitrophenol, 4-hydroxynitrobenzene, 4-hydroxynitrobenzene, p-hydroxynitrobenzene, p-hydroxynitrobenzene, para-hydroxynitrobenzene

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Danger of cumulative effects.

Harmful by inhalation, in contact with skin and if swallowed.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. The substance and/or its metabolites may bind to hemoglobin inhibiting normal uptake of oxygen. This condition, known as "methemoglobinemia", is a form of oxygen starvation (anoxia). Symptoms include cyanosis (a bluish discoloration skin and mucous membranes) and breathing difficulties. Symptoms may not be evident until several hours after exposure. At about 15% concentration of blood methemoglobin there is observable cyanosis of the lips, nose and earlobes. Symptoms may be absent although euphoria, flushed face and headache are commonly experienced. At 25-40%, cyanosis is marked but little disability occurs other than that produced on physical exertion. At 40-60%, symptoms include weakness, dizziness, lightheadedness, increasingly severe headache, ataxia, rapid shallow respiration, drowsiness, nausea, vomiting, confusion, lethargy and stupor. Above 60% symptoms include dyspnea, respiratory depression, tachycardia or bradycardia, and convulsions. Levels exceeding 70% may be fatal.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result. The material may produce foreign body irritation in certain individuals.

SKIN

Skin contact with the material may be harmful; systemic effects may result following absorption. The material is not thought to be a skin irritant (as classified using animal models). Abrasive damage however, may result from prolonged exposures. Good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. Toxic effects may result from skin absorption.

INHALED

The material is not thought to produce respiratory irritation (as classified using animal models). Nevertheless inhalation of dusts, or fume, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. Breathing in nitrophenols may result in irritation of the lining of the nasal passage, and mouth and poisoning of the body's nervous system. Poisoning of the body's central nervous system, reduces the blood's capacity to carry oxygen to the body's tissues and organs. Flushed face, headache and a sense of elation are common. Moderate exposure may produce bluish discoloration of the lips, earlobes, and finger nails. A loss of muscle coordination may occur along with difficulty breathing, drowsiness, nausea, vomiting. High concentrations may result in rapid beating of the heart, rapid violent spasms of the body's muscles and loss of consciousness.

CHRONIC HEALTH EFFECTS

Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray. Exposure over a long period of time to nitrophenols may produce kidney and liver damage. Inflammation of the colon, intestine, liver, stomach, and enlargement of the spleen may occur.