

化 学 品 安 全 技 术 说 明 书

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MSDS标题

P-TERT-BUTYLTOLUENE MSDS报告

产品标题

4-叔丁基甲苯

CAS号

98-51-1

化学品及企业标识

PRODUCT NAME

P-TERT-BUTYLTOLUENE

NFPA

Flammability	2
Toxicity	2
Body Contact	2
Reactivity	0
Chronic	2
SCALE: Min/Nil=0 Low=1 Moderate=2 High=3 Extreme=4	

PRODUCT USE

Solvent; intermediate in the production of tert- butyl benzoic acid which is used in the manufacture of unsaturated polyesters and alkyd resins (where it functions as a resin modifier and regulator in air- drying and baking operations).

SYNONYMS

C11-H16, C6H5C(CH3)3, "toluene, p-tert-butyl-", "toluene, p-tert-butyl-", p-methyl-tert-butylbenzene, p-methyl-tert-butylbenzene, TBT

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Harmful if swallowed.

HARMFUL - May cause lung damage if swallowed.

Flammable.

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. Considered an unlikely route of entry in commercial/industrial environments.

EYE

Although the material is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterized by tearing or conjunctival redness (as with windburn).

SKIN

The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material. The material may accentuate any pre-existing skin condition. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless,

good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. Inhalation hazard is increased at higher temperatures. Toxic effects are increased by consumption of alcohol. Inhalation of high concentrations of gas/vapor causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact/absorption and inhalation of vapor. Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]. Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis following. In a review of 33 operators exposed over a three year period it was found that 8 had registered complaints of malaise, nausea, nasal irritation and weakness. Four of these had experienced tremour whilst 8 of the 33 experienced hypotension, tachycardia, and a failure to respond normally in a stress test for coronary insufficiency. Blood tests found transient haemoglobin reduction (in 8), anaemia (in 2), leucopenia (in 7), abnormal differential counts with eosinophilia (in 13), prolonged clotting time taken as indicative of thrombocytopenia (in 5), jaundice (in 2). It was concluded that low grade intoxication had followed exposure to the substance and that human signs and symptoms were chiefly referable to the cardiovascular, haemopoietic and central nervous systems. Among rats inhaling 50 ppm of the substance days/week for up to 26 weeks, haemoglobin percentage and erythrocyte and leukocyte counts were reduced. Exposures were associated with a dose-dependent increase in liver and kidney weights, evidence of fatty liver degeneration, depression of erythropoiesis and an increase in myeloid to erythroid ratios. Chronic exposure of rats to 50 ppm for 4 hours/day produced injury to neurons of the deep cortical areas, striatum and medulla oblongata. p-tert-butyltoluene was considered teratogenic in rats and chicks as defined by gross abnormalities or significant changes in body weights or bone lengths.