

化 学 品 安 全 技 术 说 明 书

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MSDS标题

PALLADIUM ACETYLACETONATE MSDS报告

产品标题

乙酰丙酮钯(II)

CAS号

14024-61-4

化学品及企业标识

PRODUCT NAME

PALLADIUM ACETYLACETONATE

NFPA

Flammability	1
Toxicity	2
Body Contact	2
Reactivity	1
Chronic	2

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

PRODUCT USE

Homogeneous catalyst.

SYNONYMS

C10-H14-O4-Pd, [CH₃COCH=C(O-)CH₂]Pd

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Harmful to aquatic organisms.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be damaging to the health of the individual. Colloidal palladium is reported to increase body temperature, produce discoloration and tissue death at the site of injection, decrease body-weight and cause some destruction of blood cells. Ingestion of 2,4-pentanedione (acetylacetone) may produce irritation of the mouth, oesophagus and stomach producing abdominal discomfort, nausea, vomiting diarrhoea, dizziness, malaise and fainting.

EYE

There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Exposure to 2,4-pentadione may produce excessive redness of the eyes and swelling of the conjunctivae; blinking and tearing may occur. Corneal damage is unlikely.

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. 2,4-Pentadione may produce contact dermatitis or urticaria. Prolonged contact with 2,4-pentanedione may produce severe discomfort or pain, redness and swelling and corrosion, ulceration and development of fissures. The inflamed area may show bleeding. 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.

INHALED

Inhalation may produce health damage*. 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. Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. 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. At sufficiently high doses the material may be neurotoxic(i.e. poisonous to the nervous system). High doses of 2,4-pentanedione produced dyspnae, severe, central nervous system depression and death in experimental animals. Similar effects were produced at lower repeated doses although some animals survive and develop a central nervous system disorder characterised by irreversible cerebellar syndrome. Thymic necrosis and atrophy accompany the central nervous system damage. [Patty's]. Inhalation of vapours may produce narcosis.

CHRONIC HEALTH EFFECTS

There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. There is limited evidence that, skin contact with this product is more likely to cause a sensitization reaction in some persons compared to the general population. 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. Repeated overexposure to 200 ppm 2,4-pentanedione vapor may result in inflammation of the nasal mucosa. Higher concentrations may produce central nervous system effects, and immune system and bone marrow deficits. Recurrent exposure to high concentrations of the 2,4-pentadione vapor (~650 ppm) produces lethal degenerative lesions in the central nervous system and thymus. Exposure in pregnancy can damage to fetus. There is a weak association between palladium chloride and tumor production on the basis of a single study. In use the substance may decompose to produce 2,4-pentanedione a powerful neurotoxin.