西亚试剂® Xiya Reagent 说明书

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化 学 品 安 全 技 术 说 明 书

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MSDS标题

HOLMIUM(III) OXIDE MSDS报告

产品标题

氧化钬

CAS号

12055-62-8

化学品及企业标识

PRODUCT NAME

HOLMIUM(III) OXIDE

NFPA

Flammability	0
Toxicity	1
Body Contact	0
Reactivity	0
Chronic	2

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

PRODUCT USE

Refractories, catalyst, spectrophotometric reference standard.

SYNONYMS

Ho2-O3, holmia, "diholmium trioxide", "holmium(+3) oxide", "holmium sesquioxide", "holmium trioxide"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual following ingestion, especially where pre- existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern. 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.

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.

CHRONIC HEALTH EFFECTS

Principal routes of exposure are usually by skin contact and inhalation of generated dust. As with any chemical product, contact with unprotected bare skin; inhalation of vapor, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice. Symptoms of exposure to rare earth oxides are coughing, congestion, granuloma in lungs and haemoglobinemia. Dermatitis can be aggravated by contact with holmium oxide. Rare earths may cause impairment of blood clotting. Repeated or prolonged exposure to holmium oxide may produce skin and conjunctival irritation; application to abraded skin may result in erythema, epilation and scar formation. Holmium oxide, like other rare earth materials, is poorly absorbed by the gastrointestinal tract. The reported Lethal Dose in rats was >1000mg/kg. Intratracheal administration to animals of some rare earth oxides, including holmium oxide, has been reported to cause changes ranging from mild to marked fibrosis (a condition marked by the increase of interstitial fibrous tissue), emphysema (a condition of the lungs marked by abnormal dilation of the its air spaces and distension of its walls), small white nodules, granulomas (a mass or nodule of chronically inflamed tissue with granulations that are generally associated with an infective process), giant cells, and accumulation of dust in the lungs. Exposure to vapours has been reported to result in sensitivity to heat, itching, and an increased awareness of odour and taste, bronchiolitis, sub-acute bronchiolitis (inflammation of the bronchial tubes), acute transient chemical pneumonitis (inflammation of the lungs caused by chemical irritation), focal hypertrophia (excessive development of an organ), emphysema, regional bronchiolar stricturing, cellular eosinophilia (abnormal increase in the number of leucocytes with cytoplasmic inclusions, in the blood that is characteristic of allergic reactions), and, in some cases, fatal delayed chemical hyperemia (excess of blood in a body part). Target organs of attack: Skin, blood and upper respiratory tract. Holmium is a rare earth metal - heavy type (yttrium family). There has been no reports of poisoning in workers, although the metal can cause chest X-ray abnormalities due to its high density. It can cause scarring of the lungs, anemia and changes in blood cell distribution, due to inhalation of their dusts.