

化 学 品 安 全 技 术 说 明 书

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MSDS标题

HEXYLPHOSPHONIC ACID MSDS报告

产品标题

正十六烷基磷酸;十六烷基磷酸;正十六烷基磷酸

CAS号

4721-17-9

化学品及企业标识

PRODUCT NAME

HEXYLPHOSPHONIC ACID

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

Linear alkyl phosphonic acids and their phosphonate salts are surfactants because of their classic bifunctional chemical structure, $RP(O)(OH)_2$, consisting of both non-polar organic hydrophobic groups and anionic inorganic hydrophilic groups. Like the related alkyl sulfonates, they are used as detergents, dispersants, emulsifiers, and chelating agents. Alkyl phosphonic acids are typically sparingly soluble in both organic solvents and water,

but become more soluble in water when neutralized to phosphonates at neutral to high pH.

SYNONYMS

CH₃(CH₂)₅P(O)(OH)₂, "n-hexylphosphonic acid", "n-hexylphosphonic acid", "1-hexylphosphonic acid", "1-hexylphosphonic acid", "1-hexanephosphonic acid", "1-hexanephosphonic acid", "hexyl phosphonate"

CANADIAN WHMIS SYMBOLS

EMERGENCY OVERVIEW

RISK

Irritating to eyes, respiratory system and skin.

May cause long-term adverse effects in the aquatic environment.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

The material has NOT been classified as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. 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, unintentional ingestion is not thought to be cause for concern.

EYE

This material can cause eye irritation and damage in some persons.

SKIN

This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition. Skin contact is not thought to have harmful health effects, however the material may still produce health damage following entry through wounds, lesions or abrasions. 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

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. 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. Aliphatic, aromatic and substituted phosphonates exhibit moderate to high toxicity, and toxicity is increased when there are benzene rings and halogen or nitro group substitution.

CHRONIC HEALTH EFFECTS

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Limited evidence suggests that repeated or long-term occupational exposure may 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.