Product: Friction Material Page 6 of 12

Symptoms and Effects of Exposure to Selected Individual Components (continued)

CHLOROBUTYL RUBBER

Inhalation hazards – Negligible at ambient temperatures (-18 to 38°C).

Other hazards - Eye contact: slightly irritating, but will not injure eye tissue. Prolonged exposure to elevated temperature (>170°C) leads to decomposition to low molecular weight halogenated hydrocarbons and HCl. These species may be potential irritants or cause systemic effects.

DI (2-ETHYLHEXYL) PHTHALATE (DEHP)

Inhalation hazards - Can cause irritation of the nasal passages and throat resulting in coughing and

Other hazards - Causes irritation of the eyes and skin. High or repeated exposure may effect the liver.

DICUMYL PEROXIDE

Inhalation Hazards – Inhalation of dust may cause mild respiratory tract irritation.

Other Hazards - May cause mild eye and skin irritation.

FILLITE

A hollow glass bubble.

Inhalation Hazards – Considered a nuisance dust, otherwise benign.

Other Hazards - Contains up to 1.5% bound quartz.

GRAPHITE

Inhalation hazards - Acute: exposure may result in cough, dyspnea, black sputum, and fibrosis. Chronic: Prolonged exposure may cause pneumoconiosis. It is reported that diseases of the respiratory and cardiovascular system may be aggravated by exposure.

HYDRATED LIME

Inhalation hazards – Dust may cause irritation of nasal and respiratory passages.

Other hazards - Lime is a strong eye irritant, and may cause corrosive damage and blindness. Exposure to dust may cause severe skin irritation, drying and burning, particularly with damaged skin. Swallowing excessive amounts may damage mucous membranes and the digestive system. There are no known chronic hazards.

IRON DUST (IRON OXIDE)

Inhalation hazards - Repeated or prolonged exposures to iron dust may cause a form of benign pneumoconiosis called siderosis. Exposure is generally not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis-producing materials such as silica.

Other hazards - Contact may cause skin and eye irritation.

IRON PYRITE (IRON DISULFIDE)

Iron pyrite is classified as a nuisance particulate.

Inhalation hazards – Excessive inhalation of respirable dust may produce pleuritis, and/or fatal pneumonia. Acute - irritation of the eyes, skin, nose, throat and respiratory system. Chronic -exposure to high concentrations of dust and fume containing iron compounds (at least 6-10 years) may produce siderosis with changes visible on chest X-rays.

KYANITE

Inhalation hazard – may cause coughing, and shortness of breath.

Other hazards - may irritate eyes and abrade the skin.

LEAD

Inhalation hazard - Acute: exposure may cause muscle and joint pain, and damage to the brain and nervous system.

Ingestion hazard – May affect kidneys.

Revised: 03/11/2004