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### **IDENTIFICATION**

### STATEMENT OF HAZARDOUS NATURE

#### HAZARDOUS ACCORDING TO WORKSAFE AUSTRALIA CRITERIA.

#### **SYNONYMS**

### SHIPPING NAME

CORROSIVE LIQUID, TOXIC, N.O.S. (contains sodium dichromate and arsenic acid)

Product Name: Osmose Lifewood - Impretect C.S. (CCA Salt)

Other Names:

5/01

CAS RN No(s): None None

UN Number: 2922
Packing Group: III
Dangerous Goods Class: 8

Subsidiary Risk: 6.1, None Hazchem Code: 2X
Poisons Schedule Number: None

### USE

Timber preservative for the protection against borer and insect attack and fungal decay.

## PHYSICAL DESCRIPTION/PROPERTIES

## **APPEARANCE**

Orange/brown water based odourless liquid; mixes with water.

Boiling Point (°C):

Melting Point (°C):

Vapour Pressure (kPa):

Not available

Not applicable

Specific Gravity: 1.37

Flash Point (°C):

Lower Explosive Limit (%):

Upper Explosive Limit (%):

Solubility in Water (g/L):

Not applicable

Not applicable

Miscible

## **INGREDIENTS**

NAME	CAS RN	%
sodium dichromate	10588-01-9	30-60
copper sulfate, pentahydrate	7758-99-8	30-60
arsenic acid	7778-39-4	10-30
water	7732-18-5	0-30

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#### **HEALTH HAZARD**

#### **ACUTE HEALTH EFFECTS**

#### **SWALLOWED**

The liquid is corrosive.

to the gastro-intestinal tract.

and is.

toxic.

if swallowed.

and may be.

fatal if swallowed unless immediate treatment is applied.

Considered an unlikely route of entry in commercial/industrial environments

## **EYE**

The liquid is corrosive.

to the eyes.

and is.

capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

### SKIN

The liquid is corrosive.

to the skin.

and is capable of causing.

chemical burns.

allergic skin reactions.

and.

skin sensitisation.

Sensitisation may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

## **INHALED**

Not normally a hazard due to non-volatile nature of product.

The vapour/mist is.

extremely.

discomforting.

and.

corrosive.

and.

to the upper respiratory tract.

repeated exposure may cause sensitisation and/or allergic reactions. Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping.

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### **HEALTH HAZARD ...**

The material may produce respiratory tract irritation. Symptoms of pulmonary irritation may include coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and a burning sensation.

Unlike most organs, the lung can respond to a chemical insult or a chemical agent, by first removing or neutralising the irritant and then repairing the damage (inflammation of the lungs may be a consequence).

The repair process (which initially developed to protect mammalian lungs from foreign matter and antigens) may, however, cause further damage to the lungs (fibrosis for example) when activated by hazardous chemicals. Often, this results in an impairment of gas exchange, the primary function of the lungs. Therefore prolonged exposure to respiratory irritants may cause sustained breathing difficulties.

## **CHRONIC HEALTH EFFECTS**

Principal routes of exposure are usually by. skin contact / eye contact. and.

inhalation of generated dust.

The material may accentuate any pre-existing skin condition.

Sensitisation may give severe responses to very low levels of exposure, in situations where exposure may occur.

Skin contact may result in severe irritation particularly to broken skin. Ulceration known as "chrome ulcers" may develop. Chrome ulcers and skin cancer are significantly related.

Chromium VI exposures have been related to higher incidence of lung cancer. Chromium(III) is considered an essential trace nutrient serving as a component of the "glucose tolerance factor" and a cofactor for insulin action. High concentrations of chromium are also found in RNA. Trivalent chromium is the most common form found in nature.

Chronic inhalation of trivalent chromium compounds produces irritation of the bronchus and lungs, dystrophic changes to the liver and kidney, pulmonary oedema, and adverse effects on macrophages. Intratracheal administration of chromium(III) oxide, in rats, increased the incidence of sarcomas, and tumors and reticulum cell sarcomas of the lung. There is inadequate evidence of carcinogenicity of chromium(III) compounds in experimental animals and humans (IARC).

Chronic exposure to hexavalent chromium compounds reportedly produces skin, eye and respiratory tract irritation, yellowing of the eyes and skin, allergic skin and respiratory reactions, diminished sense of smell and taste, blood disorders, liver and kidney damage, digestive disorders and lung damage. There is sufficient evidence of carcinogenicity of chromium(VI) compounds in experimental animals and humans to confirm these as Class 1 carcinogens (IARC).

Exposure to chromium during chrome production and in the chrome pigment industry is associated with cancer of the respiratory tract. A slight increase in gastrointestinal cancer following exposure to chromium compounds has also been reported. The greatest risk is attributed to exposure to acid-soluble, water-insoluble hexavalent chromium which occurs in roasting and refining processes. Animal studies support the idea that the most potent carcinogenic compounds are the slightly soluble hexavalent compounds. The cells are more active in the uptake of the hexavalent forms compared to trivalent forms and

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#### **HEALTH HAZARD ...**

this may explain the difference in occupational effect. It is the trivalent form, however, which is metabolically active and binds with nucleic acid within the cell suggesting that chromium mutagenesis first requires biotransformation of the hexavalent form by reduction.

Hexavalent chromes produce chronic ulceration of skin surfaces (quite independent of other hypersensitivity reactions exhibited by the skin). Water-soluble chromium(VI) compounds come close to the top of any published "hit list" of contact allergens (eczematogens) producing positive results in 4 to 10% of tested individuals. On the other hand only chromium(III) compounds can bind to high molecular weight carriers such as proteins to form a complete allergen (such as a hapten). Chromium(VI) compounds cannot. It is assumed that reduction must take place for such compounds to manifest any contact sensitivity. The apparent contradiction that chromium(VI) salts cause allergies to chromium(III) compounds but that allergy to chromium(III) compounds is difficult to demonstrate is accounted for by the different solubilities and skin penetration of these compounds. Water-soluble chromium(VI) salts penetrate the horny layer of the skin more readily than chromium(III) compounds which are bound by cross-linking in the horny layer ("tanning", as for leather) and therefore do not reach the cells involved in antigen processing.

#### **FIRST AID**

#### **SWALLOWED**

- · IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- · For advice, contact a Poisons Information Centre or a doctor.
- · Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:
- · For advice, contact a Poisons Information Centre or a doctor.
- · Urgent hospital treatment is likely to be needed.
- · If conscious, give water to drink.
- · INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

NOTE: Wear a protective glove when inducing vomiting by mechanical means.

- · In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
- · If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist.
- · If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the MSDS.

#### EYE

If this product comes in contact with the eyes:

- · Immediately hold eyelids apart and flush the eye continuously with running water.
- · Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- · Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- · Transport to hospital or doctor without delay.
- · Removal of contact lenses after an eye injury should only be undertaken by

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### **HEALTH HAZARD ...**

skilled personnel.

#### SKIN

If skin or hair contact occurs:

- · Immediately flush body and clothes with large amounts of water, using safety shower if available.
- · Quickly remove all contaminated clothing, including footwear.
- $\cdot$  Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

#### **INHALED**

- · If fumes or combustion products are inhaled remove from contaminated area.
- · Lay patient down. Keep warm and rested.
- $\cdot$  Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- · Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- · Transport to hospital, or doctor.

#### ADVICE TO DOCTOR

For acute or short term repeated exposures to dichromates and chromates:

- · Absorption occurs from the alimentary tract and lungs.
- $\cdot$  The kidney excretes about 60% of absorbed chromate within 8 hours of ingestion. Urinary excretion may take up to 14 days.
- · Establish airway, breathing and circulation. Assist ventilation.
- · Induce emesis with Ipecac Syrup if patient is not convulsing, in coma or obtunded and if the gag reflex is present.
- · Otherwise use gastric lavage with endotracheal intubation.
- · Fluid balance is critical. Peritoneal dialysis, haemodialysis or exchange transfusion may be effective although available data is limited.
- · British Anti-Lewisite, ascorbic acid, folic acid and EDTA are probably not effective.
- · There are no antidotes.
- · Primary irritation, including chrome ulceration, may be treated with ointments comprising calcium-sodium-EDTA. This, together with the use of frequently renewed dressings, will ensure rapid healing of any ulcer which may develop. The mechanism of action involves the reduction of Cr (VI) to Cr(III) and subsequent chelation; the irritant effect of Cr(III)/ protein complexes is thus avoided. [ILO Encyclopedia]

[Ellenhorn and Barceloux: Medical Toxicology]

#### PRECAUTIONS FOR USE

### **EXPOSURE STANDARDS**

No data for Osmose Lifewood - Impretect C.S. (CCA Salt).

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### PRECAUTIONS FOR USE ...

### **EXPOSURE STANDARDS FOR MIXTURE**

"Worst Case" computer-aided prediction of spray/ mist or fume/ dust components and concentration:

Composite Exposure Standard for Mixture (TWA): 0.0261 mg/m³.

Operations which produce a spray/mist or fume/dust, introduce particulates to the breathing zone.

If the breathing zone concentration of ANY of the components listed below is exceeded, "Worst Case" considerations deem the individual to be over overexposed.

Component	Breathing Zone ppm	Breathing Zone mg/m³	Mixture Conc (%)
arsenic acid	0.0078	30	0
sodium dichromate	0.0104	40	0
copper sulfate, pentahydrate	0.0078	30	0

### **INGREDIENT DATA**

### SODIUM DICHROMATE:

chromium (VI) compounds, water soluble, as Cr (A.Wt: 51.99)

ES TWA: 0.05 mg/m3 SENSITISER

TLV TWA: 0.05 mg/m<sup>3</sup>, A1

WARNING: This substance has been classified by the ACGIH as A1 CONFIRMED HUMAN

CARCINOGEN

MEL TWA: 0.05 mg/m³ IDLH Level: 15 mg/m³

Some jurisdictions require that health surveillance be carried on workers

occupationally exposed to inorganic chromium. Such surveillance should emphasise

- · demography, occupational and medical history and health advice
- · physical examination with emphasis on the respiratory system and skin
- · weekly skin inspection of hands and forearms by a "responsible person"

TRK: 0.1 mg/m³ including lead chromate (as dusts/aerosols) with the exception of

compounds practically insoluble in water such as barium chromate

- for manual arc welding with coated electrodes
- production of soluble chromium(VI) compounds

TRK: 0.5 mg/m<sup>3</sup> - others measured as inhalable fraction of the aerosol

The technical exposure limit, TRK (Technische Richtkonzentrationen), defines the airborne concentration of named carcinogenic materials which is the minimum possible given the state of current technologies. TRK values are assigned only for materials for which there is no current MAK (German exposure standard). Observance of the TRK value is intended to reduce the risk of adverse effects on health but does NOT completely eliminate it. Since no threshold doses can be determined for carcinogens, health considerations require that the exposure limits be kept as far as possible below the TRK and that the TRK value be gradually reduced. The limitation of exposure peaks is regulated as follows;

Short-term exposure limit: 5 x TRK

Short-term exposure duration: 15 min/average

Frequency per work shift: 5 times

Interval: 1 hour.

Report No. 35 1999, Deutsche Forschungsgemeinschaft.

WARNING: This substance is classified by the NOHSC as Category 2 Probable Human

Carcinogen

## COPPER SULFATE, PENTAHYDRATE:

copper dusts and mists, as Cu (A.Wt: 63.54)

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### PRECAUTIONS FOR USE ...

ES TWA: 1 mg/m³ TLV TWA: 1 mg/m³

OES TWA: 1 mg/m3; STEL: 2 mg/m3

copper fume, as Cu ES-TWA: 0.2 mg/m³ TLV-TWA: 0.2 mg/m³ OES-TWA: 0.2 mg/m³

IDLH Level: 100 mg/m³ (fume)

## ARSENIC ACID:

arsenic soluble compounds, as As (A.Wt: 74.92)

ES TWA: 0.05 mg/m<sup>3</sup>

WARNING: Classified by NOHSC as Category 1 - ESTABLISHED HUMAN CARCINOGEN

Use control measures / protective gear to avoid any personal contact. The ES-TWA is based solely on the prevention of systemic effects due to inhalation and is not protective against the substantial risk of cancer produced by exposure to inorganic arsenic. Some jurisdictions require health surveillance be performed on occupationally exposed workers.

Such surveillance should emphasise

- · demography, occupational and medical history and health advice
- physical examination with emphasis on the peripheral nervous system and skin
- · urinary total arsenic
- · records of personal exposure.

arsenic inorganic compounds, as As (A.Wt: 74.92)

TLV TWA: 0.01 mg/m<sup>3</sup> A1

WARNING: This substance has been classified by the ACGIH as A1

CONFIRMED HUMAN CARCINOGEN

IDLH Level: 5 mg/m³ (as As)

Inorganic arsenic compounds appear to produce an increased incidence of skin and

lung cancers following their use in medicine, after drinking

arsenic-contaminated water, or after occupational exposure. Cancers at other sites have been described but a clear association has yet to be determined.

TRK: 0.1 mg/m<sup>3</sup>

(measured as inhalable fraction of the aerosol).

Currently available analytical methods for monitoring workplace concentrations in most cases yield total levels of the elements arsenic, nickel or cobalt in the substances analysed. The differentiation of the type of chemical compound, which is necessary from a toxicological standpoint, is frequently not possible without special analytical measures. Because of such difficulties in the identification of individual compounds of these elements, it is recommended that the threshold values be applied in general for the relevant element and its compounds as a basis for meeting safety precautions, even if it has not been analytically proved that carcinogenic compounds of these elements are present in the work area.

It is recommended that this TRK value also be used as a basis for protective measures for arsenic and all its compounds which are not mentioned here (with the exception of arsine).

The threshold value is based on analysis of metal content.

The technical exposure limit, TRK (Technische Richtkonzentrationen), defines the airborne concentration of named carcinogenic materials which is the minimum possible given the state of current technologies. TRK values are assigned only for materials for which there is no current MAK (German exposure standard). Observance of the TRK value is intended to reduce the risk of adverse effects on health but does NOT completely eliminate it. Since no threshold doses can be determined for carcinogens, health considerations require that the exposure

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### PRECAUTIONS FOR USE ...

limits be kept as far as possible below the TRK and that the TRK value be gradually reduced. The limitation of exposure peaks is regulated as follows;

Short-term exposure limit: 5 x TRK

Short-term exposure duration: 15 min/average

Frequency per work shift: 5 times

Interval: 1 hour

Report No. 35 1999, Deutsche Forschungsgemeinschaft.

## WATER:

No exposure limits set by NOHSC or ACGIH

#### **ENGINEERING CONTROLS**

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant: Air Speed:

solvent, vapours, degreasing etc., 0.25-0.5 m/s (50-100 f/min)

evaporating from tank (in still air)
aerosols, fumes from pouring
0.5-1 m/s (100-200 f/min.)

operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active

velocity into zone of active

generation)

direct spray, spray painting in shallow 1-2.5 m/s (200-500 f/min) booths, drum filling, conveyer loading,

crusher dusts, gas discharge (active generation into zone of rapid air

motion)

grinding, abrasive blasting, tumbling, 2.5-10 m/s (500-2000 f/min.)

high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).

Within each range the appropriate value depends on:

Lower end of the range Upper end of the range

1: Room air currents minimal or 1: Disturbing room air currents

favourable to capture
2: Contaminants of low toxicity or of
2: Contaminants of high toxicity

nuisance value only

3: Intermittent, low production.
4: Large hood or large air mass in
5: High production, heavy use
6: Small hood - local control only motion

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the

air speed at the extraction point should be adjusted, accordingly, after

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### PRECAUTIONS FOR USE ...

reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

### PERSONAL PROTECTION

#### EYE

Safety glasses with side shields; or as required, Chemical goggles. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

### HANDS/FEET

Impervious gloves. PVC gloves. Rubber gloves. Safety footwear

#### **OTHER**

Overalls.

Impervious apron.

Evewash unit.

Ensure there is ready access to a safety shower

## **RESPIRATOR**

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone	Maximum Protection	Half-face	Full-Face
Level ppm (volume)	Factor	Respirator	Respirator
1000	10	-AUS P	-
1000	50	_	-AUS P
5000	50	Airline *	-
5000	100	-	-2 P
10000	100	-	-3 P
	100+		Airline**

<sup>\* -</sup> Continuous Flow \*\* - Continuous-flow or positive pressure demand

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

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### SAFE HANDLING

## STORAGE AND TRANSPORT

#### SUITABLE CONTAINER

- · Polyethylene or polypropylene container.
- · Packing as recommended by manufacturer
- · Check all containers are clearly labelled and free from leaks.

DO NOT use aluminium or galvanised containers

### STORAGE INCOMPATIBILITY

Avoid strong acids, bases.

Avoid storage with oxidisers.

and.

halogens.

Avoid reaction with.

aluminium.

zinc.

and.

galvanised iron

## STORAGE REQUIREMENTS

Keep dry.

- · Store in original containers.
- · Keep containers securely sealed as supplied.
- · No smoking, naked lights, heat or ignition sources.
- · Store in a cool, dry, well ventilated area.
- Store under cover and away from sunlight.
- · Store below safe storage (control) temperature.
- · Store away from flammable or combustible materials, debris and waste.
- Contact may cause fire or violent reaction.
- · Store away from incompatible materials.
- · Store away from foodstuff containers
- · DO NOT stack on wooden floors or wooden pallets.
- · Protect containers against physical damage, FRICTION or SHOCK.
- · Check regularly for spills and leaks.
- · Observe manufacturer's storage and handling recommendations.
- · Restrictions may apply on quantities and to other material permitted in the same location.

### **TRANSPORTATION**

Class 6 - Poisonous (toxic) substances shall not be loaded in the same vehicle or packed in the same freight container with:

Class 1 - Explosives;

Class 3 - Flammable liquids (where the flammable liquid is nitromethane);

Class 5.1 - Oxidising agents (where the poisonous substances are capable of igniting and burning);

Class 5.2 - Organic peroxides (where the poisonous substances are capable of igniting and burning);

Food and food packaging in any quantity.

#### SPILLS AND DISPOSAL

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### **SAFE HANDLING ...**

### MINOR SPILLS

- · Clean up all spills immediately.
- No smoking, naked lights, ignition sources.
- · Avoid all contact with any organic matter including fuel, solvents, sawdust, paper or cloth and other incompatible materials, as ignition may result.
- · Avoid breathing dust or vapours and all contact with skin and eyes.
- · Control personal contact by using protective equipment.
- · Contain and absorb spill with dry sand, earth, inert material or vermiculite.
- DO NOT use sawdust as fire may result.
- · Scoop up solid residues and seal in labelled drums for disposal.
- · Neutralise/decontaminate area.

### **MAJOR SPILLS**

- · Clear area of personnel and move upwind.
- · Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- · Wear full body protective clothing with breathing apparatus.
- Prevent spillage from entering drains or water courses.
- · Consider evacuation (or protect in place).
- DO NOT use water on spill.
- · No smoking, flames or ignition sources.
- · Increase ventilation.
- · Contain with DRY sand, earth or other clean, dry inert material.
- · NEVER use organic absorbents such as sawdust, paper, cloth or wet materials.
- · Use spark-free and explosion-proof equipment.
- · Collect recoverable product in labelled containers for possible recycling.
- · DO NOT mix recovered with fresh material to avoid contamination risk.
- $\cdot$  Absorb remaining product with dry sand, earth or vermiculite.
- $\cdot$  Collect residues and seal in labelled drums for disposal.
- · Use flooding quantities of water to wash area.
- · Prevent runoff into drains.
- · If contamination of drains or waterways occurs advise emergency services.

#### **DISPOSAL**

Recycle wherever possible.

Consult manufacturer for recycling options.

Consult State Land Waste Management Authority for disposal.

Treat and neutralise at an effluent treatment plant.

Reduce Cr (VI) to Cr (III) using meta-bisulfite, neutralise with lime and reclaim sludge.

Bury residue in an authorised landfill.

Decontaminate empty containers.

Return containers to drum reconditioner or recycler.

### **FIRE FIGHTERS' REPORT**

## **EXTINGUISHING MEDIA**

Dry agent.

Carbon dioxide.

Bromochlorodifluoromethane (BCF) (where regulations permit).

Use of water or other liquid extinguishants may increase the pollution hazard.

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### **SAFE HANDLING ...**

### **FIRE FIGHTING**

- · Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- · Wear breathing apparatus plus protective gloves.
- · Prevent, by any means available, spillage from entering drains or water course.
- · Consider evacuation (or protect in place).
- · Fight fire from a safe distance, with adequate cover.
- · Extinguishers should be used only by trained personnel.
- · Use water delivered as a fine spray to control fire and cool adjacent area.
- · Avoid spraying water onto liquid pools.
- · Do not approach containers suspected to be hot.
- · Cool fire exposed containers with water spray from a protected location.
- · If safe to do so, remove containers from path of fire.
- · If fire gets out of control withdraw personnel and warn against entry.
- · Equipment should be thoroughly decontaminated after use.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

#### FIRE/EXPLOSION HAZARD

- · Will not burn but increases intensity of fire.
- · Heating may cause expansion or decomposition leading to violent rupture of containers.
- · Heat affected containers remain hazardous.
- $\cdot$  Contact with combustibles such as wood, paper, oil or finely divided metal may produce spontaneous combustion or violent decomposition.
- · May emit irritating, poisonous or corrosive fumes.

Decomposes on heating and produces toxic fumes of. metal oxides

#### FIRE INCOMPATIBILITY

Avoid contact with.

reducing agents

Contact with concentrated solutions of this material may ignite flammable or combustible materials (eg. petroleum products, paper,

wood, sulphur, aluminium and plastics).

Combustion may be violent in the case of finely divided materials oxidised in this way.

Explosion may occur on reaction with chemicals such as acetic anhydride; anhydrous hydroxylamine and others.

#### **HAZCHEM**

2X

## **CONTACT POINT**

AUSTRALIAN POISONS INFORMATION CENTRE 24 HOUR SERVICE: 13 11 26 POLICE, FIRE BRIGADE OR AMBULANCE: 000

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## **CONTACT POINT ...**

NEW ZEALAND POISONS INFORMATION CENTRE 24 HOUR SERVICE: 0800 764 766 NZ EMERGENCY SERVICES:111

## End of Report

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