

# Identification of Substance & Company



#### **Company Details:**

Hilti (New Zealand) Ltd Unit 1/B, 525 Great South Rd

Penrose

Auckland, 1061

PO Box 112-030. Penrose

Ph 09 526 7783 (between 7-30 AM and 6-30 PM)

**EMERGENCY TELEPHONE NUMBER** 0800 623 000 (National Poisons Centre)

#### **Product**

**Product name** HIT-RE 500 V3 Other names Hilti HIT-RE 500 V3 **HSNO** approval Component A: HSR002544 Component B: HSR002542

Approval description Component A: Construction Products (Subsidiary Hazard) Group Standard

2006, Component B: Construction Products (Corrosive [8.2C]) Group

Standard 2006

**UN** number 3259/3077

**Proper Shipping Name** AMINES, SOLID, CORROSIVE, n.o.s. (2-methyl-1,5-pentanediamine, m-

Xylylenediamine), ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, n.o.s. (Bisphenol A Epoxy Resin)

**Packaging group** PGII/PGIII Hazchem code 2X

Uses **BU** Anchor

# **Hazard Identification**

# **Approval**

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006 and HSR002542: Construction Products (Corrosive [8.2C]) Group Standard 2006 and is classified as follows:

#### Classes **Hazard Statements**

Component A: 6.3A H315 - Causes skin irritation. 6.4A H320 - Causes eye irritation.

6.5B H317 - May cause an allergic skin reaction. 6.9B H371 - May cause damage to organs

H411 - Toxic to aquatic life with long lasting effects. 9.1B

Component B:

H303 - May be harmful if swallowed 6.1E (oral) 6.1E (dermal) H313 - May be harmful in contact with skin. 8.2B

H314 - Causes severe skin burns and eye damage.

8.3A H318 - Causes serious eye damage. H317 - May cause an allergic skin reaction. 6.5B 6.9 (respiratory irritation) H335 - May cause respiratory irritation.

#### **SYMBOLS**

# DANGER



#### Other Classifications

This substance does contain silica (quartz) which is classed as a carcinogen (6.7A) if in an inhalable form (e.g. fine dust). This substance is a paste.

# Page 1 of 8



#### **Precautionary Statements**

Keep out of reach of children.

Read label before use.

Avoid breathing vapours.

Use only outdoors or in a well-ventilated area.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/eye protection/face protection.

Avoid release to the environment. Collect spillage.

IF exposed or concerned: Get medical advice/ attention.

Further precautionary statements can be found in Section 4 - First Aid.

# Composition / Information on Ingredients

| Component A - ingredients                                                           | CAS/ Identification | Class for ingredient(s)                     | Conc   |
|-------------------------------------------------------------------------------------|---------------------|---------------------------------------------|--------|
| Quartz (SiO2)                                                                       | 14808-60-7          | 6.7A, 6.9A, only if respirable dust         | 25-40% |
| Bisphenol A epoxy resin                                                             | 25068-38-6          | 6.3B, 6.4A, 6.5B (contact), 6.9B, 9.1B      | 25-40% |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3epoxypropane and phenol | 9003-36-5           | 6.3A, 6.4A, 6.5B, 9.1B                      | 10-25% |
| butanedioldiglycidyl ether                                                          | 2425-79-8           | 6.1D (dermal, Inhalation), 6.3A, 6.4A, 6.5B | 5-10%  |
| Trimethylolpropane, (chloromethyl)oxirane polymer                                   | 30499-70-8          | 6.3B, 6.4A, 6.5B, 9.1C                      | 5-10%  |

| Component B - ingredients             | CAS/ Identification | Class for ingredient(s)                                                               | Conc   |
|---------------------------------------|---------------------|---------------------------------------------------------------------------------------|--------|
| 2-Methyl-1,5-pentanediamine           | 15520-10-2          | 3.1D, 6.1D (oral, dermal, inhalation),<br>8.2C, 8.3A, 6.9 (respiratory<br>irritation) | 25-40% |
| Quartz (SiO2)                         | 14808-60-7          | 6.7A, 6.9A, only if respirable dust                                                   | 10-25% |
| Phenol, styrenated                    | 61788-44-1          | 6.3A, 6.4A, 6.5B                                                                      | 5-10%  |
| m-Xylylenediamine                     | 1477-55-0           | 6.1C (inhalation), 6.1D (oral), 6.5B, 8.2C, 8.3B, 9.1C                                | 5-8%   |
| 2,4,6 Tris(dimethylaminomethyl)phenol | 90-72-2             | 6.1D (oral, dermal), 8.2C, 8.3A, 9.3C                                                 | 1-2.5% |
| 3-aminopropyltriethoxysilane          | 919-30-2            | 6.1D (oral), 8.2B, 8.3A                                                               | 1-2.5% |

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

#### 4. First Aid

#### **General Information**

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). IF exposed or concerned: Get medical advice/ attention.

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

#### **Exposure**

Eye contact

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. If vomiting occurs, place victim

face downwards, with the head turned to the side and lower than the hips to prevent vomit

entering the lungs. Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Apply continuous irrigation with water for at least

15 minutes holding eyelids apart. Immediately call a POISON CENTER or

doctor/physician.

Skin contact IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with

water/shower. Wash contaminated clothing before reuse. Immediately call a POISON

CENTER or physician.

**Inhaled** IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor. If experiencing respiratory symptoms: Call a

POISON CENTER or doctor/physician.

### **Advice to Doctor**

Treat symptomatically

Page 2 of 8



# **Firefighting Measures**

Fire and explosion hazards: There are no specific risks for fire/explosion for this chemical. It is not classed as

flammable

Suitable extinguishing

substances:

Carbon dioxide, extinguishing powder, foam, fog sprays.

Unsuitable extinguishing

substances:

Water jets

**Products of combustion:** Carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of nitrogen and

smoke. May form toxic mixtures in air and may accumulate in sumps, pits and other low-

lying spaces, forming potentially explosive mixtures.

**Protective equipment:** Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and

eye protection.

Hazchem code: 2X

# **Accidental Release Measures**

Containment If greater than 1000kg is stored, secondary containment and emergency plans to manage

any potential spills must be in place.

**Emergency procedures** The container size will generally prevent a major spill.

In the event of a large spillage (>100kg) alert the fire brigade to location and give brief

description of hazard.

Stop the source of the leak, if safe to do so. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council

immediately).

Clean-up method Collect product and seal in properly labelled containers or drums for disposal. If

contamination of crops, sewers or waterways has occurred advise local emergency

services.

Disposal Mop up and collect recoverable material into labelled containers for recycling or salvage.

Recycle containers wherever possible. This material may be suitable for approved landfill.

Dispose of only in accord with all regulations.

**Precautions** Wear protective equipment to prevent skin and eye contamination and the inhalation of

vapours. Work up wind or increase ventilation

# **Storage & Handling**

Storage Avoid storage of harmful substances with food. Keep in a cool, dry and dark place; 5°C to

Store out of reach of children. Containers should be kept closed in order to minimise contamination. Protect from heat and direct sunlight. Keep away from ignition sources.

Avoid contact with incompatible substances as listed in Section 10.

Handling Keep exposure to a minimum, and minimise the quantities kept in work areas. See

section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour. Do not smoke Use only as directed; avoid uncontrolled

mixing with other material, esp polymerisable or combustible materials.

# **Exposure Controls / Personal Protective Equipment**

#### Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 10mg/m<sup>3</sup> for dusts and mists when limits have not otherwise been established.

| NZ Workplace  | Ingredient                       | WES-TWA                                                                         | WES-STEL |  |  |  |
|---------------|----------------------------------|---------------------------------------------------------------------------------|----------|--|--|--|
| Exposure Stds | Component A:                     |                                                                                 |          |  |  |  |
| (2013)        | Bisphenol-A epichlorhydrin resin | no data                                                                         | no data  |  |  |  |
|               | Quartz (SiO2)                    | 0.2mg/m³ (Respirable dust, quartz)<br>0.1 mg/m³ (respirable dust, cristabolite) | no data  |  |  |  |
|               | Component B:                     | orr mg/m (respiration area, energial)                                           |          |  |  |  |
|               | m-Xylylenediamine                | Ceiling: 0.1mg/m <sup>3</sup>                                                   | no data  |  |  |  |
|               | Quartz (SiO2) (see above)        | 0.2mg/m <sup>3</sup> (Respirable dust)                                          | no data  |  |  |  |
|               |                                  | 0.1 mg/m <sup>3</sup> (respirable dust, cristabolite)                           | no data  |  |  |  |

<sup>\*</sup> These workplace exposure standards are also Prescribed Exposure Standards (PES) under the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

Page 3 of 8



### **Engineering Controls**

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

#### **Personal Protective Equipment**

**Eyes** 



To protect eyes, it is recommended that goggles, safety glasses or full face mask be worn. Avoid wearing contact lenses.

Skin



Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves, e.g. nitrile rubber, NBR gloves. Replace frequently. Gloves should be checked for tears or holes before use. Natural rubber, NR, Leather gloves are not suitable for this purpose.

Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.

Respiratory

A respirator with an organic vapour cartridge when airborne concentrations approach the WES (section 8) should be used. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

# **WES Additional Information**

Not applicable

# Physical & Chemical Properties

Appearance Component A: light grey paste

Component B: red paste

**Odour** amine like

**pH** Component A: no data

Component B: 11.5

Vapour pressureno dataViscosityno dataBoiling pointno data

Volatile materials

Freezing / melting point

Solubility

0% organic solvents
not determined
insoluble in water

Specific gravity / density 1.45g/cm³ (component A), 1.31g/cm³ (component B)

Flash point no data
Danger of explosion no data
Auto-ignition temperature no data
Upper & lower flammable limits no data

Corrosiveness Component B: Corrosive to skin and eyes

# 10. Stability & Reactivity

Stability Stable

Conditions to be avoided Containers should be kept closed in order to avoid contamination. Keep from extreme heat

and open flames.

Incompatible groups No specific incompatibility known

Substance Specific none known Incompatibility
Hazardous decomposition None known

products
Hazardous reactions
none known

# 11. Toxicological Information

# **Summary**

IF SWALLOWED: may be harmful if swallowed.

IF IN EYES: may cause severe eye injury.

IF ON SKIN: may cause burns to the skin. May cause sensitisation for some individuals. May be harmful on contact with the skin.

IF INHALED: vapours may be irritating to the respiratory tract.

# Page 4 of 8



#### **Supporting Data**

Eye

Acute Oral

Using LD<sub>50</sub>'s for ingredients, the calculated LD<sub>50</sub> (oral, rat) for the Component A is > 5,000

mg/kg. LD₅₀ (oral) data: Bisphenol A diglycidyl ether resin : 15600mg/kg (mouse), 10.7mL/kg (rat), Formaldehyde, oligomeric reaction products with 1-chloro-

2,3epoxypropane and phenol 5000mg/kg (rat), butanedioldiglycidyl ether 1134mg/kg (rat),

[3-(2,3-Epoxypropoxy)propyl]trimethoxysilane 8.025 mg/kg (rat).

Using  $LD_{50}$ 's for ingredients, the calculated  $LD_{50}$  (oral, rat) for the Component B is between

2000 and 5,000 mg/kg. Data considered includes: 2-Methyl-1,5-pentanediamine

1690mg/kg (rat), Phenol, styrenated >2500mg/kg (rat), m-Xylylenediamine 930mg/kg (rat), 2,4,6 Tris(dimethylaminomethyl)phenol 1673 mg/kg (rat), 3-aminopropyltriethoxysilane

3.65mL/kg/bw (oral, rat).

**Dermal** Using LD<sub>50</sub>'s for ingredients, the calculated LD<sub>50</sub> (dermal, rat) for Component A

>5000mg/kg (rat). Data considered includes: Bisphenol A epoxy resin >20mL/kg (rabbit), Formaldehyde, oligomeric reaction products with 1-chloro-2,3epoxypropane and phenol

2000mg/kg (rat), butanedioldiglycidyl ether 1130mg/kg (rabbit), [3-(2,3-

Epoxypropoxy)propyl]trimethoxysilane 4.250 mg/kg (rabbit).

Using LD<sub>50</sub>'s for ingredients, the calculated LD<sub>50</sub> (dermal, rat) for the Component B is >5000 mg/kg. Data considered includes: 2-Methyl-1,5-pentanediamine 1870mg/kg (rat), Phenol, styrenated >2000mg/kg (rat), m-Xylylenediamine 2000mg/kg (rabbit, 2,4,6

Tris(dimethylaminomethyl)phenol 1280 mg/kg (rat),

Inhaled Using LC<sub>50</sub>'s for ingredients, the calculated LC<sub>50</sub> (inhalation, rat) for component A >5mg/L.

Data considered includes: [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane > 5.300 mg/l (4h,

rat), between 1-5mg/L.

Using LC<sub>50</sub>'s for ingredients, the calculated LC<sub>50</sub> (inhalation, rat) for component B is >5mg/L: Data considered includes: 2-Methyl-1,5-pentanediamine 4.9mg/L (rat) dust mist, Phenol, styrenated 158.3mg/L (4h), m-Xylylenediamine  $\sim$ 0.97mg/L (for dust mist, 4hr). Component A is considered to be irritating to the eye, because some of the ingredients

(Bisphenol A diglycidyl ether resin), present is considered an eye irritant.

Component B is considered to be corrosive to the eye, because some of the ingredients

(2-Methyl-1,5-pentanediamine, m-Xylylenediaminepresent, 2,4,6

Tris(dimethylaminomethyl)phenol, 3-aminopropyltriethoxysilane) present at >3% are

considered eye corrosives.

Skin Component A is considered to be a skin irritant, because some of the ingredients

(Bisphenol A diglycidyl ether resin) present are considered skin irritants.

Component B is considered to be corrosive to the skin, because one of the ingredients (2-

Methyl-1,5-pentanediamine, m-Xylylenediaminepresent, 2,4,6

Tris(dimethylaminomethyl)phenol, 3-aminopropyltriethoxysilane) at >3% is considered skin

corrosives.

Chronic Sensitisation Component A is considered to be a contact sensitizer due to the presence of Bisphenol A

diglycidyl ether resin, Formaldehyde, oligomeric reaction products with 1-chloro-2,3epoxypropane and phenol, 2,2'-[1,6-hexanediylbis(oxymethylene)]bisoxirane and

Trimethylolpropane, (chloromethyl)oxirane polymer.

Component B is considered to be a contact sensitiser due to the presence of m-

Xylylenediamine and phenol, styrenated).

**Mutagenicity** No evidence of mutagenicity for the mixture or any of the ingredients.

This mixture does contain crystalline silica, however it is not in an inhalable form.

Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC Group 1). The mixture is a paste and does not trigger this

classification, however if sanding the cured mixture, respirable dust may result.

**Reproductive /** No ingredient present in the mixture at concentrations > 0.1% is considered a reproductive

**Developmental** toxicant. **Systemic** Compon

Carcinogenicity

Component A is suspected to be a target organ toxicant by dermal contact and by inhalation, because one of the ingredients (Bisphenol A epoxy resin) present in greater

than 1% are suspected to be a target organ toxicant.

This mixture also contains crystalline silica. This substance is in the form of a paste. Crystalline silica triggers 6.9A classification if it is in the form of a fine respirable dust in an occupational (chronic exposure) setting. This is due to the development of acute silicosis which can occur following exposure to extremely high levels of fine silica dust. Silicosis is a type of pneumoconiosis – a disease of the lung that causes inflammation, scar tissue, lesions and fibrosis in the lung (alveolar). Symptoms include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). Silicosis can occur following prolonged

exposure (e.g., 10 years) to relatively high levels of fine crystalline silica dust.

Component B is considered a respiratory irritant. 2-Methyl-1,5-pentanediol is irritating to

the respiratory tract.

None known.

Aggravation of

existing conditions



# **Ecological Data**

#### **Summary**

Component A is expected to be toxic to the aquatic environment.

**Supporting Data** 

Aquatic For component A: Using EC<sub>50</sub>'s for ingredients, the calculated EC<sub>50</sub> for component A is

between 1mg/L and 10mg/L. Bisphenol A epoxy resin is classed 9.1B by EPA and present

For Component B: m-Xylylenediamine: >100mg/l (96hr, Oncorhynchus mykiss, rainbow

trout), 16mg/L (48hr, Daphnia magna).

Bioaccumulation No data

Degradability not readily biodegradable Soil No data available for the mixture.

**Terrestrial vertebrate** This product is considered harmful to terrestrial vertebrates. No LC<sub>50</sub> (diet) data for

ingredients are available and the classification is based on the LD<sub>50</sub> (oral) – see section 11

oral toxicity.

Terrestrial invertebrate

The mixture is not considered harmful to terrestrial invertebrates.

Biocidal Not applicable

**Environmental effect levels** No EELs are available for this mixture or ingredients

# **Disposal Considerations**

Restrictions There are no product-specific restrictions, however, local council and resource consent

conditions may apply, including requirements of trade waste consents.

Disposal method Disposal of this product must comply with the requirements of the Resource Management

Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment. The cartridges are a disposable injection system and therfore cannot be recycled. Send to

landfill or similar.

#### Transport Information

Contaminated packaging

Transport according to NZS 5433 (Transport of Hazardous Substances on Land). Considered a hazardous substance for

transport.

**UN number:** 3259/3077 Proper shipping name: AMINES, SOLID, CORROSIVE, n.o.s.

(2-methyl-1,5-pentanediamine, m-

Xylylenediamine),

**ENVIRONMENTALLY HAZARDOUS** SUBSTANCE, SOLID, n.o.s. (Bisphenol

A Epoxy Resin)

Packing group: Class(es) 8, 9. PGII, PGIII

**Precautions:** Hazchem code: Ecotoxic, corrosive 2X

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport

by sea.

**UN number:** 3259/3077 Proper shipping name: AMINES, SOLID, CORROSIVE,

n.o.s. (2-methyl-1,5-pentanediamine,

m-Xvlvlenediamine).

**ENVIRONMENTALLY HAZARDOUS** 

SUBSTANCE, SOLID, n.o.s. (Bisphenol A Epoxy Resin)

Class(es) Packing group: PGII, PGIII

**Precautions:** Ecotoxic, corrosive **EmS** F-A, S-B, F-A, S-F

Limited Quantities: 1kg, 5kg.

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods

Regulations for transport by air.

**UN number:** 3259/3077 Proper shipping name: AMINES, SOLID, CORROSIVE,

n.o.s. (2-methyl-1,5-pentanediamine,

m-Xylylenediamine),

**ENVIRONMENTALLY HAZARDOUS** 

SUBSTANCE, SOLID, n.o.s.

(Bisphenol A Epoxy Resin)

Class(es) Packing group: PGII, PGIII **Precautions: ERG Guide** Ecotoxic, corrosive 154, 171

Page 6 of 8



# Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval code: HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006 and HSR002542: Construction Products (Corrosive [8.2C]) Group Standard 2006.

#### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

SDS To be available within 10 minutes in workplaces storing any quantity.

Labelling No removal of labels and/or decanting of product into other containers can occur.

Required if > 1000kg is stored. Emergency plan

Approved handler Not required. Tracking Not required.

Bunding & secondary containment Not required (this substance is not a pooling substance)

Required if 1000kg is stored in any one location. Signage

Location test certificate Not required. Flammable zone Not required.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls

for a location will depend on the classification and total quantities of other substances present in that location.

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

#### Other Information

# **Abbreviations**

Approval HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006

and HSR002542: Construction Products (Corrosive [8.2C]) Group Standard 2006 **Approval Code** 

Controls, EPA. www.epa.govt.nz

**CAS Number** Unique Chemical Abstracts Service Registry Number

Ceiling Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical

agent to which a worker may be exposed at any time.

**Controls Matrix** List of default controls linking regulation numbers to Matrix code (e.g. T1, I16). EC<sub>50</sub>

Ecotoxic Concentration 50% - concentration in water which is fatal to 50% of a test

population (e.g. daphnia, fish species)

**EPA** Environmental Protection Authority (New Zealand)

**HAZCHEM Code** Emergency action code of numbers and letters that provide information to emergency

services, especially fire fighters

HSNO Hazardous Substances and New Organisms (Act and Regulations)

**IARC** International Agency for Research on Cancer

LEL Lower Explosive Limit

 $LD_{50}$ Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).

LC<sub>50</sub> Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population

(usually rats)

MSDS (SDS) Material Safety Data Sheet (or Safety Data Sheet)

**PES** Prescribed Exposure Standard means a WES or a biological exposure standard that is

prescribed in a regulation, a safe work instrument or an approval under HSNO (including

group standards).

**STEL** Short Term Exposure Limit - The maximum airborne concentration of a chemical or

biological agent to which a worker may be exposed in any 15 minute period, provided the

TWA is not exceeded

**TWA** Time Weighted Average – generally referred to WES averaged over typical work day

(usually 8 hours)

**UEL Upper Explosive Limit UN Number United Nations Number** 

Workplace Exposure Standard - The airborne concentration of a biological or chemical **WES** 

agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring

using procedures that gather air samples in the worker's breathing zone.



References

Unless otherwise stated comes from the EPA HSNO chemical classification information Data

database (CCID).

**EPA Transfer Gazettes** Classifications and controls assigned for specific ingredients (consolidated gazette, 2004) **WES 2016** 

The NZ Workplace Exposure Standards Effective from 2016, published by WorkSafe NZ

and available on their web site - www.worksafe.govt.nz.

**WES 2002** Workplace Exposure Standards published by the Occupational Safety and Health Service,

Department of Labour, January 2002, ISBN 0-477-03660-0. These are the WES referred

to under the Group Standard (HSNO approval) and may constitute a PES.

Other References: Suppliers SDS

**Review** 

Date Reason for review October 2016 NA - new SDS

#### **Disclaimer**

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: (09) 940 30 80.

