



# CONCRETE RESURFACER

RESURFACER FOR AGED OR SPALLED CONCRETE.

## 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

**PRODUCT NAME:**  
CONCRETE RESURFACER

**RECOMMENDED USE**  
RESURFACER FOR AGED OR SPALLED CONCRETE.

**SUPPLIER:**  
CEMIX LIMITED

**ADDRESS**  
19 ALFRED STREET ONEHUNGA,  
AUCKLAND, NEW ZEALAND.

**TELEPHONE:**  
64 9 636 1000

**FACSIMILE:**  
64 9 636 0000

**EMERGENCY CONTACT:**  
0800 ASK CEMIX

## 2. HAZARDS IDENTIFICATION

**HAZARD CATEGORY:** IRRITANT

**6.3A** SKIN IRRITANT  
**8.3A** EYE CORROSIVE  
**6.7A** KNOWN CARCINOGEN  
**6.9A** KNOWN HUMAN TARGET ORGAN TOXICANT  
**9.1D** HARMFUL TO THE AQUATIC ENVIRONMENT

**NOTE:** TILE ADHESIVE IS CONSIDERED IRRITATING TO SKIN WHEN DRY; HOWEVER, THERE IS POSSIBILITY OF BURNS IF WET TILE ADHESIVE IS LEFT IN CONTACT WITH THE SKIN FOR PROLONGED TIME.

**CLASS:** NOT APPLICABLE  
**SUBSIDIARY RISK:** NOT APPLICABLE  
**PACKING GROUP:** NOT APPLICABLE  
**POISON SCHEDULE:** NOT APPLICABLE

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	CAS NUMBER	PROPORTION	CLASS FOR INGREDIENTS
PORTLAND CEMENT:	659971-15-1	35 - 55%	8.3A, 6.3A, 6.7A 6.9A
SAND:	14808-60-7	10 - 30%	6.7A 6.9A
PLASTICISERS & FILLERS:	PROPRIETARY	5 -25%	6.3B, 6.4A

THIS IS A COMMERCIAL PRODUCT WHOSE EXACT RATIO OF COMPONENTS MAY VARY. TRACE QUANTITIES OF IMPURITIES ARE ALSO LIKELY.

## 4. FIRST AID

YOU SHOULD CALL THE NATIONAL POISONS CENTRE IF YOU FEEL THAT YOU MAY HAVE BEEN HARMED, BURNED OR IRRITATED BY THIS PRODUCT. THE NUMBER IS 0800 764 766 (0800 POISON) (24 HOUR EMERGENCY LINE). IF MEDICAL ADVICE IS NEEDED, HAVE THIS MSDS, PRODUCT CONTAINER OR LABEL AT HAND. IF EXPOSED OR CONCERNED, GET MEDICAL ADVICE OR ATTENTION.

### RECOMMENDED FIRST AID FACILITIES:

READY ACCESS TO RUNNING WATER IS RECOMMENDED. ACCESSIBLE EYEWASH IS RECOMMENDED. HAND WASH AND SOAP.

**SWALLOWED:** IF SWALLOWED; DO NOT INDUCE VOMITING. RINSE MOUTH. CONTACT A DOCTOR IF FEEL UNWELL.

**EYE CONTACT:** IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO. APPLY CONTINUOUS IRRIGATION WITH WATER FOR AT LEAST 15 MINUTES HOLDING EYELIDS APART. IMMEDIATELY CALL A POISON CENTRE OR DOCTOR.

**SKIN CONTACT:** IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. IF SKIN IRRITATION OCCURS, GET MEDICAL ATTENTION/ADVICE. WASH CONTAMINATED CLOTHING BEFORE REUSE.

**INHALATION:** IF BREATHING IS DIFFICULT, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. IF PATIENT IS UNCONCIOUS, PLACE IN THE RECOVERY POSITION (ON THE SIDE) FOR TRANSPORT AND CALL A DOCTOR. IF EXPERIENCING RESPIRATORY SYMPTOMS: IMMEDIATELY CALL THE POISON CENTRE OR DOCTOR.

**ADVICE TO DOCTOR:**  
TREAT SYMPTOMATICALLY

**FIRST AID FACILITIES:**  
EYEWASH AND SAFETY SHOWER SHOULD BE AVAILABLE IN WORKPLACE.



7. HANDLING & STORAGE

**SAFE HANDLING INFORMATION:** AVOID STORAGE OF HARMFUL SUBSTANCES WITH FOOD. STORE OUT OF REACH OF CHILDREN. CONTAINERS SHOULD BE CLOSED IN ORDER TO MINIMISE CONTAMINATION. KEEP IN A COOL, DRY PLACE. AVOID CONTACT WITH INCOMPATIBLE SUBSTANCES AS LISTED IN SECTION 10.

**HANDLING:** KEEP EXPOSURE TO A MINIMUM AND MINIMISE THE QUANTITIES KEPT IN WORK AREAS. MINIMISE DUST GENERATION AND ACCUMULATION. SEE SECTION 8 WITH REGARD TO PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS. AVOID SKIN AND EYE CONTACT AND INHALATION OF DUST.

8. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	GREY POWDER
SPECIFIC GRAVITY:	~1.0KG/LITRE
VAPOUR PRESSURE:	NOT APPLICABLE
PH	10 - 11
BOILING POINT:	NOT APPLICABLE
MELTING POINT:	NOT APPLICABLE
SOLUBILITY:	NEGLIGIBLE
FLASH POINT:	NOT APPLICABLE
IGNITION TEMPERATURE:	>350°C

14. TRANSPORT INFORMATION

TRANSPORT ACCORDING TO NZS 5433 (TRANSPORT OF HAZARDOUS SUBSTANCES ON LAND) NOT CONSIDERED A HAZARDOUS SUBSTANCE FOR TRANSPORT.

UN NUMBER: NA  
PROPER SHIPPING NAME: NA  
CLASS(ES): NA  
PACKAGING GROUP: NA  
PRECAUTIONS: NA  
HAZCHEM CODE: NA

5. FIRE FIGHTING MEASURES

**FIRE/EXPLOSION HAZARD:** THERE ARE NO SPECIFIC RISKS FOR FIRE/EXPLOSION FOR THIS CHEMICAL. IT IS NON-COMBUSTIBLE.

**SUSTAINABLE EXTINGUISHING SUBSTANCES:** NOT APPLICABLE

**UNSUITABLE EXTINGUISHING SUBSTANCES:** UNKNOWN

**PRODUCTS OF COMBUSTION:** PRODUCT DOES NOT BURN. DUST MAY FORM IRRITATING ATMOSPHERE. PRODUCT WILL REACT EXOTHERMICALLY WITH WATER. CONTAMINATED WATER WILL BE STRONGLY ALKALINE. PRODUCT MAY DECOMPOSE IN A FIRE AND PRODUCE TOXIC OR CORROSIVE FUMES.

**PROTECTIVE EQUIPMENT:** SELF-CONTAINED BREATHING APPARATUS. SAFETY BOOTS, NON FLAMMABLE OVERALLS, GLOVES, HAT AND EYE PROTECTION.

**HAZCHEM CODE:** NOT APPLICABLE

6. ACCIDENTAL RELEASE MEASURES

**CONTAINMENT:** IF GREATER THAN 1000KG IS STORE, SECONDARY CONTAINMENT IS REQUIRED. EMERGENCY PLANS TO MANAGE ANY POTENTIAL SPILLS MUST BE IN PLACE. DO NOT WASH DOWN DRAINS.

**EMERGENCY PROCEDURE:** IN THE EVENT OF LARGE SPILLAGE (>100kg) OF THE DRY OR WETTED MIXTURE, ALERT THE FIRE BRIGADE TO LOCATION AND GIVE BRIEF DESCRIPTION OF THE HAZARD.

**CLEAN UP METHOD:** COLLECT PRODUCT AVOIDING ANY DUST FORMATION. SEAL IN PROPERLY LABELLED CONTAINERS OR DRUMS FOR DISPOSAL. IF CONTAMINATION OF CROPS, SEWERS OR WATERWAYS HAS OCCURRED ADVISE LOCAL EMERGENCY SERVICES. DO NOT WASH DOWN DRAINS.

**DISPOSAL:** MOP UP CAREFULLY, SWEEP UP AND COLLECT RECOVERABLE MATERIAL INTO LABELLED CONTAINERS FOR RECYCLING OR SALVAGE. AVOID THE CREATION OF DUST.

**PRECAUTIONS:** THE DUST MAY FORM IRRITATING ATMOSPHERE. CONTAMINATED WATER WILL BE STRONGLY ALKALINE. DO NOT ALLOW CONTAMINATED WATER TO ENTER THE ENVIRONMENT. WEAR PROTECTIVE CLOTHING EQUIPMENT TO PREVENT SKIN AND EYE CONTAMINATION AND THE INHALATION OF DUST. WORK UP WIND OR INCREASE VENTILATION.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**WORKPLACE EXPOSURE STANDARDS:** A WORKPLACE EXPOSURE STANDARD (WES) HAS NOT BEEN ESTABLISHED BY THE NZ DEPARTMENT OF LABOUR FOR THIS PRODUCT. THERE IS A GENERAL LIMIT OF 10mg/m3 FOR DUSTS AND MISTS WHEN LIMITS HAVE NOT OTHERWISE BEEN ESTABLISHED.

INGREDIENTS	WES-TWA	WES-STEL
PORTLAND CEMENT	10mg/m3 (as nuisance dust)	NO DATA
SAND	SEE CRYSTALLINE SILICA	NO DATA
CRYSTALLINE SILICA	0.2mg/m3 (quartz, as respirable dust)	NO DATA
	0.1mg/m3 (Cristobalite, respirable dust)	NO DATA
OTHER INGREDIENTS		NO DATA

**ENGINEERING CONTROLS:**

IN INDUSTRIAL SITUATIONS, IT IS EXPECTED THAT EMPLOYEE EXPOSURE OF HAZARDOUS SUBSTANCES WILL BE CONTROLLED TO A LEVEL AS FAR AS BELOW THE WES AS PRACTICABLE BY APPLYING A HEIRACHY OF CONTROL REQUIRED BY THE HEALTH AND SAFETY IN EMPLOYMENT ACT 1992 (HSE). 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 CLOTHING:****EYES:**

PROTECT EYES WITH GOGGLES, SAFETY GLASSES OR FULL FACE MASK. AVOID WEARING CONTACT LENSES.

**SKIN:**

AVOID REPEATED OR PROLONGED SKIN CONTACT. WEAR OVERALLS, WATERPROOF BOOTS AND IMPERVIOUS ALKALI-RESISTANT GLOVES (E.G. NITRILE, PVC, RUBBER OR NEOPRENE).

REMOVE PROTECTIVE CLOTHING AND WASH EXPOSED AREAS WITH SOAP AND WATER PRIOR TO EATING, DRINKING OR SMOKING. TAKE SPECIAL CARE TO ENSURE THAT CUTS/ ABRASIONS OR IRRITATED SKIN ARE NOT EXPOSED TO THIS PRODUCT. IT IS ALSO IMPORTANT TO ENSURE THAT WET MORTAR DOES NOT BECOME TRAPPED WITHIN GLOVES, BOOTS OR CLOTHING – LEAVING WET MORTAR IN CONTACT WITH SKIN FOR EXTENDED PERIOD OF TIME AS THIS MAY CAUSE SKIN BURNS.

IT IS IMPORTANT THAT SKIN IS ALSO COVERED WHEN DUST IS CREATED (E.G. SANDING, GRINDING, CRUSHING OR CUTTING CONCRETE). THE DUST MAY ALSO IRRITATE AND/OR DAMAGE THE SKIN.

**RESPIRATORY:**

TO PREVENT IRRITATION A WELL FITTED DUST MASK SHOULD BE USED. A FINE PARTICULATE HALF OR FULL FACE RESPIRATOR WITH AN EFFECTIVE SEAL IS RECOMMENDED WHEN AIRBORNE CONCENTRATIONS APPROACH THE WES (SECTION 8). IF SANDING, GRINDING, CRUSHING OR CUTTING CONCRETE, IT IS POSSIBLE THAT SILICA DUST WES (0.2mg/m<sup>3</sup>) WILL BE EXCEEDED, HENCE A RESPIRATOR WILL BE REQUIRED. IF EXPOSURE TO THE CONCENTRATED AQUEOUS SOLUTION, DUST AND MIST IS LIKELY, A FULL FACE RESPIRATOR WITH A PARTICULTE FILTER IS RECOMMENDED.

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**10. STABILITY AND REACTIVITY**


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**STABILITY/POLYMERISATION:** STABLE UNDER NORMAL USE & STORAGE CONDITIONS.

**CONDITION TO BE AVOIDED:**

COMBUSTIBLE SUBSTANCE. KEEP AWAY FROM SOURCES OF IGNITION. CONTAINERS SHOULD BE KEPT CLOSED IN ORDER TO AVOID CONTAMINATION.

**INCOMPATIBLE GROUPS:** NONE KNOWN.

**SUBSTANCE SPECIFIC INCOMPATIBILITY:** STRONG ACIDS.

**HAZARDOUS DECOMPOSITION:**

CARBON DIOXIDE, AND IF COMBUSTION IS COMPLETE, CARBON MONOXIDE AND SMOKE. NITROGEN, AND UNDER SOME CIRCUMSTANCES, OXIDES OF NITROGEN. WATER.

**HAZARDOUS REACTIONS:** NO SPECIFIC HAZARDS.

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**11. TOXICOLOGICAL INFORMATION**


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CONCRETE RESURFACER MAY BE HARMFUL TO SKIN AND EYES. THERE ARE ALSO LINKS BETWEEN EXPOSURE TO SILICA DUST (CONTAINED IN MORTAR) AND INCREASED RATES OF SILICOSIS. WHERE AVAILABLE TOXICOLOGICAL DATA FOR INGREDIENTS RESEARCHED AND DATA FOR THE MIXTURE CALCULATED. THE RESULTS OF THESE CALCULATIONS ARE PRESENTED BELOW:

**ACUTE EFFECTS:**

**ORAL:** THE LD<sub>50</sub> (ORAL, RAT) FOR THE MIXTURE IS >5,000mg/kg. INGESTION OF THIS PRODUCT MAY CAUSE GASTROINTESTINAL IRRITATION.







**DERMAL:** THE ESTIMATED LD50 (DERMAL, RAT) FOR THE MIXTURE IS >5,000mg/kg.

**INHALED:** THE LC50 (INHALATION, RAT) FOR THE MIXTURE IS >5mg/L (DUST MIST). SHORT TERM ACUTE SILICOSIS (SEE SYSTEMIC BELOW) CAN ALSO OCCUR WITH ONE-OFF EXPOSURES TO EXTREMELY HIGH LEVELS OF FINE CRYSTALLINE SILICA DUST. OTHER SHORT TERM EFFECTS INCLUDE IRRITATION, CHOKING AND DIFFICULTY WITH BREATHING.

**EYES:** CONTACT WITH DRY OR WET (UNHARDENED) MORTAR CAN CAUSE EFFECTS RANGING FROM IRRITATION TO SERIOUS EYE DAMAGE/BURNS AND BLINDNESS. THE pH OF THE MIXTURE IS 10-11. NOTE THE LEVEL OF IRRITATION IS DEPENDENT ON THE QUANTITY OF DUST, THE pH AND THE LENGTH OF TIME EXPOSED. E.G. IF DUST IS WASHED OUT OF THE EYE IMMEDIATELY, EFFECTS WILL BE MINOR. HOWEVER, IF DUST OR WET MORTAR IS LEFT IN CONTACT WITH THE EYE, SERIOUS DAMAGE/BLINDNESS COULD RESULT.

**SKIN:** CONTACT WITH WET (UNHARDENED) MORTAR CAN CAUSE SKIN IRRITATION OR SEVERE CHEMICAL BURNS (THIRD DEGREE). BRIEF EXPOSURE TO SKIN (I.E. WASHED OFF IMMEDIATELY) WILL RESULT IN IRRITATION. HOWEVER, IF THE MORTAR DUST IS LEFT ON THE SKIN FOR AN EXTENDED TIME (E.G. IF INSIDE BOOTS OR ABSORBED THROUGH OVERALLS), BURNS TO THE SKIN ARE POSSIBLE. THICKENING OF SKIN AND/OR RASH IS ALSO POSSIBLE. CONTACT WITH DRY MORTAR CAN ALSO CAUSE SKIN IRRITATION.

#### **CHRONIC**

**SENSITISATION:** THERE IS SOME EVIDENCE THAT EXPOSURE TO CEMENT OR MORTAR MIXTURES MAY CAUSE ALLERGIC REACTIONS TO SKIN SENSITISATION. THIS APPEARS TO BE LINKED TO CHROMIUM PRESENT IN SOME MIXTURES CONTAINING PORTLAND CEMENT, WHICH MAY INDUCE OCCUPATIONAL ASTHMA AND SKIN SENSITISATION (ALLERGIC REACTIONS). THIS MIXTURE CONTAINS LESS THAN 0.01% HEXAVALENT CHROMIUM AND HENCE IS NOT CONSIDERED SENSITISING.

**MUTAGENICITY:** NO INGREDIENT PRESENT AT CONCENTRATIONS >0.1% IS CONSIDERED A MUTAGEN.

**CARCINOGENICITY:** THIS MIXTURE DOES CONTAIN CRYSTALLINE SILICA. CRYSTALLINE SILICA INHALED IN THE FORM OF QUARTZ OR CRISTOBALITE DUST FROM OCCUPATIONAL SOURCES IS CARCINOGENIC TO HUMANS (IARC GROUP 1). THE MIXTURE TRIGGERS 6.7A CLASSIFICATION (CONFIRMED CARCINOGEN) THE CARCINOGENICITY OF SILICA IS RELATED TO LONG TERM (E.G. 10 YEARS) INHALATION OF VERY FINE PARTICULATE (E.G. FROM SAND BLASTING OR DRY CUTTING ON CONCRETE). CARCINOGENICITY OF SILICA APPEARS LINKED TO DEVELOPMENT OF SILICOSIS (SEE SYSTEMATIC BELOW) FOLLOWED BY COMPLICATIONS AND EVENTUALLY LUNG CANCER.

**REPRODUCTIVE/ DEVELOPMENTAL:** NO DATA FOR MIXTURE IS AVAILABLE. NO INGREDIENT PRESENT AT CONCENTRATIONS >0.1% IS CONSIDERED A REPRODUCTIVE OR DEVELOPMENTAL TOXICANT OR HAVE EFFECTS ON OR VIA LACTATION.

**SYSTEMATIC:** THIS MIXTURE IS CONSIDERED TO BE A TARGET ORGAN TOXICANT BECAUSE OF THE PRESENCE OF CRYSTALLINE SILICA AT GREATER THAN 1%. 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 CRYSTALLINE SILICA DUST.

#### **AGGRAVATION OF EXISTING CONDITIONS:**

PERSONS WITH EXISTING LUNG CONDITIONS MAY BE AT A HIGHER RISK OF FURTHER ADVERSE HEALTH EFFECTS (AS ABOVE). SMOKERS HAVE AN INCREASED RISK OF LUNG CANCER AND SILICOSIS.

## **12. ECOLOGICAL INFORMATION**

#### **SUMMARY:**

CONCRETE AND CONCRETE DUSTS ARE CONSIDERED TO BE HARMFUL IN THE ENVIRONMENT WHEN IN SOLUBLE FORM. THIS IS PRIMARILY DUE TO HIGH pH OF THE PRODUCT.

**AQUATIC:** NO DATA FOR THIS MIXTURE IS AVAILABLE. WATER CONTAMINATED WITH THIS PRODUCT IS ALKALINE AND SHOULD NOT BE ALLOWED TO ENTER THE ENVIRONMENT.





**BIOACCUMULATION:** NOT APPLICABLE

**DEGRADABILITY:** NOT APPLICABLE (PREDOMINANTLY NATURAL PRODUCTS).

**SOIL:** NO DATA AVAILABLE FOR THE MIXTURE. THE SOIL TOXICITY VALUE FOR THE MIXTURE IS ESTIMATED TO BE  $\geq 100\text{mg/kg}$ .

**TERRESTRIAL VERTEBRATE:** THIS PRODUCT IS NOT CONSIDERED HARMFUL TO TERRESTRIAL VERTEBRATES. NO LC50 (DIET) DATA FOR INGREDIENTS ARE AVAILABLE AND THE CLASSIFICATION IS BASED ON LD50 (ORAL) – SEE SECTION 11 ORAL TOXICITY.

**TERRESTRIAL INVERTEBRATE:** THIS MIXTURE IS NOT CONSIDERED HARMFUL TO TERRESTRIAL INVERTEBRATES.

**BIOCIDAL:** NOT DESIGNED AS A BIOCIDES.

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### 13. DISPOSAL CONSIDERATIONS

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**RESTRICTIONS:**

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.

**CONTAMINATED PACKAGING:**

THERE ARE NO PRODUCT-SPECIFIC RESTRICTIONS HOWEVER LOCAL COUNCIL AND RESOURCE CONSENT CONDITIONS MAY APPLY INCLUDING REQUIREMENTS OF TRADE WASTE CONSENTS.

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### 15. REGULATORY INFORMATION

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THIS PRODUCT IS AN APPROVED SUBSTANCE UNDER THE HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT (HSNO). APPROVAL CODE: HSR002545: CONSTRUCTION PRODUCTS (TOXIC [6.7A]) GROUP STANDARD 2006.

**SPECIFIC WORKPLACE CONTROLS:**

(AS PER HSNO APPROVAL REFERENCED TO CONTROLS MATRIX)

**KEY WORKPLACE REQUIREMENTS ARE:**

**MSDS:** 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.

**EMERGENCY PLAN:** REQUIRED IF  $>1000\text{KG}$  IS STORED.

**APPROVED HANDLER:** APPROVED HANDLERS ARE NOT REQUIRED IF THIS PRODUCT IS USED IN THE CONSTRUCTION INDUSTRY (EXEMPTED REQUIRED UNDER CONSTRUCTION GROUP STANDARDS).

**TRACKING:** NOT REQUIRED.

**BUNDING / SECONDARY**

**CONTAINMENT:** REQUIRED IS  $>1000\text{KG}$  IS STORED

**STORAGE:** REQUIRED IS  $>1000\text{KG}$  IS STORED

**LOCATION TEST CERTIFICATE:** NOT REQUIRED

**FLAMMABLE ZONE:** NOT REQUIRED

**FIRE EXTINGUISHER:** NOT REQUIRED

**OTHER LEGISLATION:**

IN NEW ZEALAND, THE USE OF THE PRODUCT MAY COME UNDER THE RESOURCE MANAGEMENT ACT AND REGULATIONS, THE HEALTH AND SAFETY IN EMPLOYMENT ACT AND REGULATIONS AND LOCAL COUNCIL/REGIONAL COUNCIL PLANS.





## 16. OTHER INFORMATION

### DATE OF PREPARATION:

13 NOVEMBER 2013

### DATE OF REVISION:

13 NOVEMBER 2015

**REASON FOR ISSUE:** THIS DATA SHEET AND THE HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION IT CONTAINS HAS BEEN PREPARED BY CEMIX LTD ACCORDING TO CURRENT REGULATORY REQUIREMENTS AS AT DATE OF ISSUE. THE PRECAUTIONS AND ADVICE PROVIDED MAY NOT BE ACCURATE FOR ALL INDIVIDUALS AND/OR SITUATIONS. IT IS THE USER'S OBLIGATION TO EVALUATE AND USE THIS PRODUCT SAFELY AND COMPLY WITH ALL APPLICABLE LEGISLATION.

## 16. OTHER INFORMATION CONT'D

### ABBREVIATIONS:

**APPROVAL CODE:** APPROVAL CONSTRUCTION PRODUCTS (TOXIC [6.7A]) GROUP STANDARD 2006, CONTROLS, ERMA. [WWW.ERMANZ.GOV.T.NZ](http://WWW.ERMANZ.GOV.T.NZ)

**CAS NUMBER:** UNIQUE CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER

**CEILING:** CEILING EXPOSURE LEVEL: THE MAXIMUM AIRBORNE CONCENTRATION OF A BIOLOGICAL OR CHEMICAL AGENT TO WHICH A WORKER MAY BE EXPOSED TO AT ANY TIME.

**CONTROLS MATRIX:** LIST OF DEFAULT CONTROLS LINKING REGULATION NUMBERS TO MATRIX CODE (E.G. T1, 116).

**EC50:** ECOTOXIC CONCENTRATION 50% - CONCENTRATION IN WATER WHICH IS FATAL TO 50% OF A TEST POPULATION (E.G. DAPHNIA, FISH SPECIES).

**ERMA:** ENVIRONMENTAL RISK MANAGEMENT AUTHORITY.

**HSNO:** HAZARDOUS SUBSTANCES AND NEW ORGANISMS (ACTS AND REGULATIONS).

**IARC:** INTERNATIONAL AGENCY ON RESEARCH ON CANCER.

**LEL:** LOWER EXPLOSIVE LIMIT

**LD50:** LETHAL DOSE 50% - DOSE WHICH IS FATAL TO 50% OF A TEST POPULATION (USUALLY RATS).

**LC50:** LETHAL CONCENTRATION 50% - CONCENTRATION IN AIR WHICH IS FATAL TO 50% OF TEST POPULATION (USUALLY RATS).

**MSDS:** MATERIAL SAFETY DATA SHEETS (OR SAFETY DATA SHEET).

**OSH – DOL:** THE OCCUPATIONAL SAFETY AND HEALTH SERVICE OF THE DEPARTMENT OF LABOUR NZ

**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 WEIGHT AVERAGE – GENERALLY REFERRED TO AS AVERAGED OVER TYPICAL WORK DAY (USUALLY 8 HOURS).

**UEL:** UPPER EXPLOSIVE LIMIT

**UN NUMBER:** UNITED NATIONS NUMBER

**WES:** WORKPLACE EXPOSURE STANDARD – THE AIRBORNE CONCENTRATION OF A BIOLOGICAL OR CHEMICAL AGENT TO WHICH A WORKER MAY BE EXPOSED IN A WORK DAY.

### REFERENCES:

**DATA:** UNLESS OTHERWISE STATED COMES FROM THE ERMA HSNO CHEMICAL CLASSIFICATION INFORMATION DATABASE (CCID) [HTTP://WWW.ERMANZ.GOV.T.NZ/COMPLIANCE/CHEMICALS.HTML](http://WWW.ERMANZ.GOV.T.NZ/COMPLIANCE/CHEMICALS.HTML) , FOR SPECIFIC CHEMICALS.

### ERMA TRANSFER GAZETTES CONTROLS MATRIX:

CLASSIFICATIONS AND CONTROLS ASSIGNED FOR SPECIFIC INGREDIENTS (CONSOLIDATED GAZETTE 2004) PART OF THE ERMA NEW ZEALAND USER GUIDE TO THE HSNO CONTROL REGULATIONS.

**WES 2010:** THE NZ WORKPLACE EXPOSURE STANDARDS EFFECTIVE FROM 2010, PUBLISHED BY OSH – DOL AND AVAILABLE ON THEIR WEBSITE [WWW.OSH.DOL.GOV.T.NZ](http://WWW.OSH.DOL.GOV.T.NZ)

**OTHER REFERENCES:** INGREDIENT MSDS'S

