Carboguard 510SG Part A

Altex Coatings Ltd

Chemwatch Hazard Alert Code: 3

Chemwatch: **9-42489**
Version No: **1.4**
Safety Data Sheet according to HSNO Regulations

Issue Date: **11/12/2013**
Print Date: **10/01/2014**
S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Carboguard 510SG Part A
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name	Altex Coatings Ltd		
Address	New Zealand		
Telephone	+64 7 5411221		
Fax	+64 7 5411310		
Website	www.altexcoatings.co.nz		
Email	Not Available		

Emergency telephone number

Association / Organisation	Not Available		
Emergency telephone numbers	0800 764766		
Other emergency telephone numbers	0800 764766		

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+800 2436 2255	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.

GHS Classification[1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Carcinogen Category 1, STOT - RE Category 2, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*
Determined by Chemwatch using GHS/HSNO criteria	6.3A, 6.4A, 6.5B (contact), 6.7A, 6.9B (inhalation), 9.1B, 9.1D

Label elements

GHS label elements	
SIGNAL WORD	**DANGER**

Hazard statement(s)

Continued...

H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s): Response

P308+P313	IF exposed or concerned: Get medical advice/attention.
P321	Specific treatment (see advice on this label).
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Precautionary statement(s): Storage

P405	Store locked up.

Precautionary statement(s): Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
25068-38-6	70-80	bisphenol A/ epichlorohydrin resin

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh 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. ▸ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs: ▸ Immediately remove all contaminated clothing, including footwear. ▸ Flush skin and hair with running water (and soap if available). ▸ Seek medical attention in event of irritation.
Inhalation	▸ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Continued...

	Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	▸ Foam.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▸ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	carbon dioxide (CO2)

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Environmental hazard - contain spillage.
Major Spills	▸ Clear area of personnel and move upwind.

	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation.
Other information	▸ Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Polyethylene or polypropylene container.
Storage incompatibility	Glycidyl ethers:

X X + X X +

X — Must not be stored together
0 — May be stored together with specific preventions
+ — May be stored together

PACKAGE MATERIAL INCOMPATIBILITIES

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
bisphenol A/ epichlorohydrin resin	125 / 50 / 4(ppm)	350 / 150 / 12.5(ppm)	500 / 100(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
Carboguard 510SG Part A	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	▸ Safety glasses with side shields.

Continued...

Skin protection	See Hand protection below
Hand protection	**NOTE:**
Body protection	See Other protection below
Other protection	▸ Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.
Thermal hazards	

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
Carboguard 510SG Part A Not Available

Material	CPI

* CPI - Chemwatch Performance Index

Respiratory protection

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Not Available

Physical state	Liquid	**Relative density (Water = 1)**	1.10
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	100	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Applicable	**Taste**	Not Available
Evaporation rate	> 1	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Immiscible	**pH as a solution(1%)**	Not Available
Vapour density (Air = 1)	>1	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▸ Presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Continued...

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).
Ingestion	The material has
Skin Contact	The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either
Eye	Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.
Chronic	Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals.

Carboguard 510SG Part A	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
bisphenol A/ epichlorohydrin resin	**TOXICITY**	**IRRITATION**
	Intraperitoneal (mouse) LD50: 4000 mg/kg	Eye (rabbit): 100 mg - mild
	Intraperitoneal (rat) LD50: 2400 mg/kg	Nil reported
	Oral (mouse) LD50: 15600 mg/kg	
	Oral (rat) LD50: 11400 mg/kg	
	Oral (rat) LD50: 13600 mg/kg	
	Not Available	Not Available

BISPHENOL A/ EPICHLOROHYDRIN RESIN	for RTECS No: SL 6475000: (liquid grade) Equivocal tumourigen by RTECS criteria Somnolence, dyspnea, peritonitis
Carboguard 510SG Part A, BISPHENOL A/ EPICHLOROHYDRIN RESIN	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	Not Applicable	**Carcinogenicity**	Carcinogen Category 1
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 2	**Reproductivity**	Not Applicable
Serious Eye Damage/Irritation	Eye Irritation Category 2A	**STOT - Single Exposure**	Not Applicable
Respiratory or Skin sensitisation	Skin Sensitizer Category 1	**STOT - Repeated Exposure**	STOT - RE Category 2
Mutagenicity	Not Applicable	**Aspiration Hazard**	Not Applicable

CMR STATUS

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty.
	Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Continued...

Labels Required

	
Marine Pollutant	
HAZCHEM	•3Z

Land transport (UN)

UN number	3082
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Environmental hazard	No relevant data
Transport hazard class(es)	Class: 9 Subrisk:
Special precautions for user	Special provisions: 274;331;335;375 limited quantity: 5 L

Air transport (ICAO-IATA / DGR)

UN number	3082
Packing group	III
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. *
Environmental hazard	No relevant data
Transport hazard class(es)	ICAO/IATA Class: 9 ICAO / IATA Subrisk: ERG Code: 9L
Special precautions for user	Special provisions: A97A158 Cargo Only Packing Instructions: 964 Cargo Only Maximum Qty / Pack: 450 L Passenger and Cargo Packing Instructions: 964 Passenger and Cargo Maximum Qty / Pack: 450 L Passenger and Cargo Limited Quantity Packing Instructions: Y964 Passenger and Cargo Maximum Qty / Pack: 30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number	3082
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Environmental hazard	No relevant data
Transport hazard class(es)	IMDG Class: 9 IMDG Subrisk:
Special precautions for user	EMS Number: F-A,S-F Special provisions: 274 335 Limited Quantities: 5 L

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard

Continued...

HSR002679	Surface Coatings and Colourants (Toxic [6.7]) Group Standard 2006

bisphenol A/ epichlorohydrin resin(25068-38-6) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD List of High Production Volume (HPV) Chemicals","Sigma-AldrichTransport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code)","Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index"

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Carboguard 510SG Part B

Altex Coatings Ltd

Chemwatch Hazard Alert Code: 3

Chemwatch: **9-42491**
Version No: **1.3**
Safety Data Sheet according to HSNO Regulations

Issue Date: **11/12/2013**
Print Date: **10/01/2014**
S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Carboguard 510SG Part B
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name	Altex Coatings Ltd		
Address	New Zealand		
Telephone	+64 7 5411221		
Fax	+64 7 5411310		
Website	www.altexcoatings.co.nz		
Email	Not Available		

Emergency telephone number

Association / Organisation	Not Available		
Emergency telephone numbers	0800 764766		
Other emergency telephone numbers	0800 764766		

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+800 2436 2255	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.

GHS Classification[1]	Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Carcinogen Category 1, STOT - RE Category 2
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*
Determined by Chemwatch using GHS/HSNO criteria	6.7A, 6.9B, 8.2B, 8.3A

Label elements

GHS label elements	
SIGNAL WORD	**DANGER**

Hazard statement(s)

H314	Causes severe skin burns and eye damage

Continued...

H318	Causes serious eye damage
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s): Response

P301+P330+P331	IF SWALLOWED: Rinse mouth.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider
P321	Specific treatment (see advice on this label).
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s): Storage

P405	Store locked up.

Precautionary statement(s): Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64-19-7	<=10	acetic acid glacial
64741-89-5	0.1	paraffinic distillate, light, solvent-refined (mild)
68410-23-1	0.1	C18 fatty acid dimers/ tetraethylenepentamine polyamides

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

Eye Contact	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 skilled personnel.
Skin Contact	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. ▸ 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.
Inhalation	▸ If fumes or combustion products are inhaled remove from contaminated area. ▸ Lay patient down. Keep warm and rested. ▸ 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.
Ingestion	▸ For advice, contact a Poisons Information Centre or a doctor at once. ▸ Urgent hospital treatment is likely to be needed. ▸ If swallowed do **NOT** induce vomiting. ▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. ▸ Observe the patient carefully. ▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

Continued...

	▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▸ Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

	Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	▸ Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility	▸ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	▸ Combustible.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	▸ Remove all ignition sources.
Major Spills	▸ Clear area of personnel and move upwind.

	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	▸ Avoid all personal contact, including inhalation.
Other information	▸ Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container	▸ Lined metal can, lined metal pail/ can.
Storage incompatibility	▸ Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.

X X + X X +

X — Must not be stored together
0 — May be stored together with specific preventions
+ — May be stored together

PACKAGE MATERIAL INCOMPATIBILITIES

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	acetic acid glacial	Acetic acid	25 (mg/m3) / 10 (ppm)	37 (mg/m3) / 15 (ppm)	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	paraffinic distillate, light, solvent-refined (mild)	Oil mist, mineral	5 (mg/m3)	10 (mg/m3)	Not Available	Sampled by a method that does not collect vapour.

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
acetic acid glacial	5(ppm)	5(ppm)	35(ppm)	250(ppm)
C18 fatty acid dimers/ tetraethylenepentamine polyamides	10(ppm)	30(ppm)	50(ppm)	250(ppm)

Ingredient	Original IDLH	Revised IDLH

Continued...

acetic acid glacial	1,000(ppm)	50(ppm)

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	▸ Chemical goggles.
Skin protection	See Hand protection below
Hand protection	▸ Wear chemical protective gloves, e.g. PVC.
Body protection	See Other protection below
Other protection	▸ Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.
Thermal hazards	

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
Carboguard 510SG Part B Not Available

Material	CPI

* CPI - Chemwatch Performance Index

Respiratory protection

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.
Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AB-AUS P2	-	AB-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AB-AUS / Class 1 P2	-
up to 100 x ES	-	AB-2 P2	AB-PAPR-2 P2 ^

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Not Available

Physical state	Liquid	**Relative density (Water = 1)**	1.00
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	117	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Miscible	**pH as a solution(1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

Continued...

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▸ Presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material has
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	The material can produce chemical burns following direct contact with the skin.
Eye	The material can produce chemical burns to the eye following direct contact.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw.

Carboguard 510SG Part B	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
acetic acid glacial	**TOXICITY**	**IRRITATION**
		Skin (human):50mg/24hr - mild
	Not Available	Not Available
paraffinic distillate, light, solvent-refined (mild)	**TOXICITY**	**IRRITATION**
	Dermal (rabbit) LD50: >5000 mg/kg	
	Oral (rat) LD50: >15000 mg/kg	
	Not Available	Not Available
C18 fatty acid dimers/ tetraethylenepentamine polyamides	**TOXICITY**	**IRRITATION**
	Dermal (rat) LD50: >5000 mg/kg *	* [Epoxylite]
	Oral (rabbit) LD50: 800 mg/kg **	
	Not Available	Not Available

Carboguard 510SG Part B	No significant acute toxicological data identified in literature search.
ACETIC ACID GLACIAL	Unreport (man) LDLo: 308 mg/kg Skin (rabbit):525mg (open)-SEVERE Oral (rat) LD50: 3310 mg/kg Eye (rabbit): 0.05mg (open)-SEVERE Inhalation (human) TCLo: 816 ppm/3 min Inhalation (rat) LCLo: 16000 ppm/4 hr Dermal (rabbit) LD50: 1060 mg/kg
PARAFFINIC DISTILLATE, LIGHT, SOLVENT-REFINED (MILD)	The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives;
C18 FATTY ACID DIMERS/ TETRAETHYLENEPENTAMINE POLYAMIDES	**[Valspar]
ACETIC ACID GLACIAL, C18 FATTY ACID DIMERS/ TETRAETHYLENEPENTAMINE POLYAMIDES	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.

Acute Toxicity	Not Applicable	**Carcinogenicity**	Carcinogen Category 1
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 1B	**Reproductivity**	Not Applicable
Serious Eye Damage/Irritation	Serious Eye Damage Category 1	**STOT - Single Exposure**	Not Applicable
Respiratory or Skin sensitisation	Not Applicable	**STOT - Repeated Exposure**	STOT - RE Category 2
Mutagenicity	Not Applicable	**Aspiration Hazard**	Not Applicable

CMR STATUS

SECTION 12 ECOLOGICAL INFORMATION

Continued...

Toxicity

Acetic acid and its salts (the acetates) can be grouped together because of their close structural relationships, their natural occurrence in plants and animals, and their fundamental role in cell metabolism, particularly in the tricarboxylic acid cycle (also known as the citric acid or Kreb's cycle), which is where humans get their energy.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty.
	Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant: NO	
HAZCHEM	Not Applicable

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002660	Surface Coatings and Colourants (Corrosive, Toxic [6.7]) Group Standard 2006

acetic acid glacial(64-19-7) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","IMO IBC Code Chapter 17: Summary of minimum requirements","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Scheduled Toxic Substances","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods","OECD List of High Production Volume (HPV) Chemicals","International Numbering System for Food Additives","International Council of Chemical Associations (ICCA) - High Production Volume List","International Fragrance Association (IFRA) Survey: Transparency List","IOFI Global Reference List of Chemically Defined Substances","GESAMP/EHS Composite List - GESAMP Hazard Profiles","CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP","FisherTransport Information","Sigma-AldrichTransport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","New Zealand Workplace Exposure Standards (WES)","International Air Transport Association (IATA) Dangerous Goods Regulations","International Maritime Dangerous Goods Requirements (IMDG Code)","Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)","International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index","OSPAR National List of Candidates for Substitution – Norway"
paraffinic distillate, light, solvent-refined (mild)(64741-89-5) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD List of High Production Volume (HPV) Chemicals","International Chemical Secretariat (ChemSec) SIN List (*Substitute It Now!)","New Zealand Cosmetic Products Group Standard - Schedule 4: Components Cosmetic Products Must Not Contain - Table 1","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","International Fragrance Association (IFRA) Survey: Transparency List","New Zealand Workplace Exposure Standards (WES)"
C18 fatty acid dimers/ tetraethylenepentamine polyamides(68410-23-1) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD List of High Production Volume (HPV) Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","OSPAR National List of Candidates for Substitution – Norway","International Numbering System for Food Additives","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Veterinary Medicines","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Pesticides"

SECTION 16 OTHER INFORMATION

Continued...

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Carboguard 510SG Part C/D

Altex Coatings Ltd

Chemwatch Hazard Alert Code: 3

Chemwatch: **9-42494**
Version No: **1.3**
Safety Data Sheet according to HSNO Regulations

Issue Date: **11/12/2013**
Print Date: **10/01/2014**
S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Carboguard 510SG Part C/D
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.

Details of the supplier of the safety data sheet

Registered company name	Altex Coatings Ltd		
Address	New Zealand		
Telephone	+64 7 5411221		
Fax	+64 7 5411310		
Website	www.altexcoatings.co.nz		
Email	Not Available		

Emergency telephone number

Association / Organisation	Not Available		
Emergency telephone numbers	0800 764766		
Other emergency telephone numbers	0800 764766		

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
+800 2436 2255	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.

GHS Classification[1]	Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Carcinogen Category 1, STOT - RE Category 2
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*
Determined by Chemwatch using GHS/HSNO criteria	6.5B (contact), 6.7A, 6.9B, 8.2B, 8.3A

Label elements

GHS label elements	
SIGNAL WORD	**DANGER**

Hazard statement(s)

H314	Causes severe skin burns and eye damage

Continued...

H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s): Response

P301+P330+P331	IF SWALLOWED: Rinse mouth.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider
P321	Specific treatment (see advice on this label).
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary statement(s): Storage

P405	Store locked up.

Precautionary statement(s): Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
14808-60-7.	<75	graded sand
65997-15-1	<30	portland cement

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

Eye Contact	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 skilled personnel.
Skin Contact	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. ▸ 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.
Inhalation	▸ If fumes or combustion products are inhaled remove from contaminated area. ▸ Lay patient down. Keep warm and rested. ▸ 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.

Continued...

Ingestion	▸ For advice, contact a Poisons Information Centre or a doctor at once. ▸ Urgent hospital treatment is likely to be needed. ▸ If swallowed do **NOT** induce vomiting. ▸ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. ▸ Observe the patient carefully. ▸ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. ▸ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▸ Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to dichromates and chromates:
- Absorption occurs from the alimentary tract and lungs.
- 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]

For acute or short-term repeated exposures to highly alkaline materials:
- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.

INGESTION:
- Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.
- Neutralising agents should never be given since exothermic heat reaction may compound injury.

* Catharsis and emesis are absolutely contra-indicated.
* Activated charcoal does not absorb alkali.
* Gastric lavage should not be used.

Supportive care involves the following:
- Withhold oral feedings initially.
- If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:
- Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

Advice for firefighters

Fire Fighting	▸ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	▸ Non combustible.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	▸ Clean up waste regularly and abnormal spills immediately.
Major Spills	▸ Clear area of personnel and move upwind.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Continued...

Safe handling	Avoid all personal contact, including inhalation.
Other information	Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container	Multi-ply paper bag with sealed plastic liner or heavy gauge plastic bag.
Storage incompatibility	For aluminas (aluminium oxide):

X X + X X +

X — Must not be stored together
0 — May be stored together with specific preventions
+ — May be stored together

PACKAGE MATERIAL INCOMPATIBILITIES

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	graded sand	Silica-Crystalline, Quartz	0.2 Respirable dust (mg/m3)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	portland cement	Portland cement	10 (mg/m3)	Not Available	Not Available	The value for inhalable dust containing no asbestos and less than 1% free silica.

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
graded sand	0.3(ppm)	0.3(ppm)	0.3(ppm)	50(ppm)

Ingredient	Original IDLH	Revised IDLH
graded sand	N.E.(mgm3)N.E.(ppm)	50(mgm3)
portland cement	N.E.(mgm3)N.E.(ppm)	5,000(mgm3)

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	Chemical goggles.
Skin protection	See Hand protection below
Hand protection	**NOTE:**
Body protection	See Other protection below
Other protection	Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area.
Thermal hazards	

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
Carboguard 510SG Part C/D Not Available

Material	CPI

* CPI - Chemwatch Performance Index

Respiratory protection

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	- -	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

Continued...

* - Negative pressure demand ** - Continuous flow
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Not Available

Physical state	Divided Solid	**Relative density (Water = 1)**	2.76
Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
pH (as supplied)	Not Available	**Decomposition temperature**	Not Available
Melting point / freezing point (°C)	Not Available	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	Not Available	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Available	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Available	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Available	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	Not Available	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Not Available	**pH as a solution(1%)**	Not Available
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▸ Presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	The material can produce chemical burns following direct contact with the skin.
Eye	The material can produce chemical burns to the eye following direct contact.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw.

Carboguard 510SG Part C/D	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
graded sand	**TOXICITY**	**IRRITATION**
	Not Available	Not Available
portland cement	**TOXICITY**	**IRRITATION**
	Not Available	Not Available

GRADED SAND	No significant acute toxicological data identified in literature search.

Continued...

Carboguard 510SG Part C/D, PORTLAND CEMENT	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	Not Applicable	**Carcinogenicity**	Carcinogen Category 1
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 1B	**Reproductivity**	Not Applicable
Serious Eye Damage/Irritation	Serious Eye Damage Category 1	**STOT - Single Exposure**	Not Applicable
Respiratory or Skin sensitisation	Skin Sensitizer Category 1	**STOT - Repeated Exposure**	STOT - RE Category 2
Mutagenicity	Not Applicable	**Aspiration Hazard**	Not Applicable

CMR STATUS

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Chromium in the oxidation state +3 (the trivalent form) is poorly absorbed by cells found in microorganisms, plants and animals.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty.
	Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant: NO	
HAZCHEM	Not Applicable

Land transport (UN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002660	Surface Coatings and Colourants (Corrosive, Toxic [6.7]) Group Standard 2006

graded sand(14808-60-7.) is found on the following regulatory lists	"International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","New Zealand Inventory of Chemicals (NZIoC)","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments","OECD List of High Production Volume (HPV) Chemicals","FisherTransport Information","Sigma-AldrichTransport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","New Zealand Workplace Exposure Standards (WES)"
portland cement(65997-15-1) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD List of High Production Volume (HPV) Chemicals","New Zealand Workplace Exposure Standards (WES)","International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs"

SECTION 16 OTHER INFORMATION

Continued...

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.