

Carboguard 696HBE Part A

ALTEX COATINGS LTD

Chemwatch Hazard Alert Code: 4

Version No: 1.1
Safety Data Sheet according to HSN0 Regulations

Issue Date: 05/02/2015
Print Date: 05/02/2015
Initial Date: 05/02/2015
S.GHS.NZLEN

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

Product Identifier	
Product name	Carboguard 696HBE Part A
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	Part A of a two pack ultra high build epoxy coating

Details of the manufacturer/importer	
Registered company name	ALTEX COATINGS LTD
Address	91-111 Oropi Road Tauranga 3112 Bay of Plenty New Zealand
Telephone	+64 7 5411221
Fax	+64 7 5411310
Website	www.alexcoatings.com
Email	neil.debenham@carboline.co.nz
Emergency telephone number	
Association / Organisation	NZ POISONS (24hr 7 days)
Emergency telephone numbers	0800 764766
Other emergency telephone numbers	0800 764766

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

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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.
Not regulated for transport of Dangerous Goods.

GHS Classification [1]	Chronic Aquatic Hazard Category 2, Eye Irritation Category 2A, Skin Corrosion/Irritation Category 2, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3
Legend:	1. Classified by Chemwatch: 2. Classification drawn from EC Directive 1272/2008 - Annex VI 6.9 (respiratory), 9.1B, 6.5B (contact), 6.4A, 6.3A
Determined by Chemwatch using GHS/HSNO criteria	

Label elements

GHS label elements



WARNING

SIGNAL WORD

Continued...

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Hazard statement(s)

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H411	Toxic to aquatic life with long lasting effects

Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.
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Precautionary statement(s) Response

P302+P352	IF ON SKIN: Wash with plenty of water and soap
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Precautionary statement(s) Storage

P405	Store locked up.
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Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
106-89-8	0	epichlorohydrin
25068-38-6	30-40	bisphenol A/ epichlorohydrin resin, liquid
1330-20-7	1-10	xylene
7631-86-9	0.67	silica amorphous

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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, without delay.
Ingestion	<ul style="list-style-type: none"> ▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. ▶ 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. ▶ Seek medical advice. ▶ Avoid giving milk or oils. ▶ Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to xylene:

- ▶ Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- ▶ Pulmonary absorption is rapid with about 60-65% retained at rest.
- ▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- ▶ Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or

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- ▶ poor arterial blood gases (pO₂ < 50 mm Hg or pCO₂ > 50 mm Hg) should be intubated.
- ▶ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- ▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- ▶ Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Methylhippu-ric acids in urine	1.5 gm/gm creatinine 2 mg/min	End of shift Last 4 hrs of shift	

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 | ▶ Combustible. |
|------------------------------|----------------|

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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|---------------------|--|
| Minor Spills | Environmental hazard - contain spillage. |
|---------------------|--|

- | | |
|---------------------|--|
| Major Spills | Environmental hazard - contain spillage. |
|---------------------|--|

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

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|----------------------|---|
| Safe handling | ▶ DO NOT allow clothing wet with material to stay in contact with skin
▶ Electrostatic discharge may be generated during pumping - this may result in fire. |
|----------------------|---|

- | | |
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| Other information | ▶ Store in original containers. |
|--------------------------|---------------------------------|

Conditions for safe storage, including any incompatibilities

- | | |
|---------------------------|--|
| Suitable container | ▶ Metal can or drum
▶ Packaging as recommended by manufacturer. |
|---------------------------|--|

- | | |
|--------------------------------|---|
| Storage incompatibility | Xylenes:
▶ may ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5-dimethylhydantoin, uranium fluoride
▶ attack some plastics, rubber and coatings
▶ may generate electrostatic charges on flow or agitation due to low conductivity. |
|--------------------------------|---|

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

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)	epichlorohydrin	Epichlorohydrin	1.9 mg/m ³ / 0.5 ppm	5.8 mg/m ³ / 1.5 ppm	Not Available	Skin absorption; Confirmed carcinogen
New Zealand Workplace Exposure Standards (WES)	xylene	Xylene (o-, m-, p-isomers)	217 mg/m ³ / 50 ppm	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	silica amorphous	Silica Amorphous, Precipitated silica	10 mg/m ³	Not Available	Not Available	The value for inhalable dust containing no asbestos and less than 1% free silica.;

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
epichlorohydrin	Epichlorohydrin	Not Available	Not Available	Not Available
bisphenol A/ epichlorohydrin resin, liquid	Epoxy resin (EPON 1001)	90 mg/m ³	990 mg/m ³	5900 mg/m ³


Continued...

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bisphenol A/ epichlorohydrin resin, liquid	Epoxy resin (EPON 1007)	90 mg/m3	990 mg/m3	5900 mg/m3
bisphenol A/ epichlorohydrin resin, liquid	Epoxy resin (EPON 820)	41 mg/m3	450 mg/m3	2700 mg/m3
bisphenol A/ epichlorohydrin resin, liquid	Epoxy resin ERL-2795	32 mg/m3	350 mg/m3	2100 mg/m3
xylene	Xylenes	Not Available	Not Available	Not Available
silica amorphous	Silica, amorphous fumed	6 mg/m3	6 mg/m3	630 mg/m3
silica amorphous	Silica amorphous hydrated	6 mg/m3	6 mg/m3	85 mg/m3

Ingredient	Original IDLH	Revised IDLH
epichlorohydrin	250 ppm	75 ppm
bisphenol A/ epichlorohydrin resin, liquid	Not Available	Not Available
xylene	1,000 ppm	900 ppm
silica amorphous	N.E. / N.E.	3,000 mg/m3

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.
Skin protection	See Hand protection below
Hands/feet protection	NOTE: ▶ The material may produce skin sensitisation in predisposed individuals.
Body protection	See Other protection below
Other protection	▶ Overalls.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Respiratory protection

Type AX-P Filter of sufficient capacity.

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	AX-AUS P2	-	AX-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AX-AUS / Class 1 P2	-
up to 100 x ES	-	AX-2 P2	AX-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)

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Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

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Material	CPI
BUTYL	C
BUTYL/NEOPRENE	C
HYPALON	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
PVDC/PE/PVDC	C
TEFLON	C
VITON	C

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	1.18
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)	Immiscible	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	▶ Unstable in the presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7

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Hazardous decomposition products

See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons.
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result.
Skin Contact	This material can cause inflammation of the skin on contact in some persons.
Eye	This material can cause eye irritation and damage in some persons.
Chronic	Studies show that inhaling this substance for over a long period (e.g. in an occupational setting) may increase the risk of cancer.

Carboguard 696HBE Part A	TOXICITY	IRRITATION
		Not Available
epichlorohydrin	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 515 mg/kg	Eye (rabbit): 23 mg
	Inhalation (rat) LC50: 250 ppm/8h	Eye (rabbit):100 mg/24 hr-moderate
	Intraperitoneal (Mouse) LD50: 170 mg/kg	Skin (rabbit): 10 mg/24 hr (open)
	Intraperitoneal (Rabbit) LD50: 160 mg/kg	
	Intraperitoneal (Rat) LD50: 113 mg/kg	
	Intravenous (Rat) LD50: 154 mg/kg	
	Oral (Mouse) LD50: 195 mg/kg	
	Oral (Rabbit) LD50: 345 mg/kg	
	Oral (rat) LD50: 90 mg/kg	
	Subcutaneous (Rat) LD50: 150 mg/kg	
	Not Available	Not Available
bisphenol A/ epichlorohydrin resin, liquid	TOXICITY	IRRITATION
	Oral (rat) LD50: 11400 mg/kg	Eye (rabbit): 100mg - Mild
	Not Available	Not Available
xylene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 5000 ppm/4h	Eye (human): 200 ppm irritant
	Intraperitoneal (Mouse) LD50: 1548 mg/kg	Eye (rabbit): 5 mg/24h SEVERE
	Intraperitoneal (Rat) LD50: 2459 mg/kg	Eye (rabbit): 87 mg mild
	Oral (Mouse) LD50: 2119 mg/kg	Skin (rabbit):500 mg/24h moderate
	Oral (rat) LD50: 4300 mg/kg	
	Subcutaneous (Rat) LD50: 1700 mg/kg	
	Not Available	Not Available
silica amorphous	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >5000 mg/kg *	* [Grace]
	Inhalation (rat) LC50: >0.139 mg/l/14h *	Eye (rabbit): non-irritating *
	Oral (rat) LD50: 3160 mg/kg	Skin (rabbit): non-irritating *
	Not Available	Not Available

EPICHLOROHYDRIN	Intraperitoneal (Guinea pig) LD50: 118 mg/kg
XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation. Reproductive effector in rats

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SILICA AMORPHOUS	For silica amorphous: When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible.
Carboguard 696HBE Part A, EPICHLOROHYDRIN, BISPHENOL A/ EPICHLOROHYDRIN RESIN, LIQUID	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	☹	Carcinogenicity	☹
Skin Irritation/Corrosion	✔	Reproductivity	☹
Serious Eye Damage/Irritation	✔	STOT - Single Exposure	✔
Respiratory or Skin sensitisation	✔	STOT - Repeated Exposure	☹
Mutagenicity	☹	Aspiration Hazard	☹

Legend: ✔ – Data required to make classification available
 ✘ – Data available but does not fill the criteria for classification
 ☹ – Data Not Available to make classification

CMR STATUS

REPROTOXIN	epichlorohydrin	ILO Chemicals in the electronics industry that have toxic effects on reproduction	H A s
	xylene	ILO Chemicals in the electronics industry that have toxic effects on reproduction	
SKIN	epichlorohydrin	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption

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
epichlorohydrin	LOW (Half-life = 56 days)	MEDIUM (Half-life = 60.75 days)
bisphenol A/ epichlorohydrin resin, liquid	HIGH	HIGH
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
silica amorphous	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
epichlorohydrin	LOW (BCF = 66)
bisphenol A/ epichlorohydrin resin, liquid	LOW (LogKOW = 2.6835)
xylene	MEDIUM (BCF = 740)
silica amorphous	LOW (LogKOW = 0.5294)

Mobility in soil

Ingredient	Mobility
epichlorohydrin	LOW (KOC = 4.491)
bisphenol A/ epichlorohydrin resin, liquid	LOW (KOC = 51.43)
silica amorphous	LOW (KOC = 23.74)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

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

SECTION 14 TRANSPORT INFORMATION

Labels Required

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Marine Pollutant	
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

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	epichlorohydrin	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	xylene	Y

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
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006

epichlorohydrin(106-89-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
bisphenol A/ epichlorohydrin resin, liquid(25068-38-6) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
xylene(1330-20-7) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
silica amorphous(7631-86-9) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)"

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
epichlorohydrin	106-89-8, 51594-55-9, 67843-74-7
bisphenol A/ epichlorohydrin resin, liquid	25068-38-6, 25085-99-8
silica amorphous	112945-52-5, 7631-86-9

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

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The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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Carboguard 696 Part B

ALTEX COATINGS LTD

Version No: 2.3
Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

Issue Date: 05/02/2015
Print Date: 05/02/2015
Initial Date: 01/01/0001
S.GHS.NZL.EN

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

Product Identifier

Product name	Carboguard 696 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	Part B of a two pack epoxy coating
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Details of the manufacturer/importer

Registered company name	ALTEX COATINGS LTD
Address	91-111 Oropi Road Tauranga 3112 Bay of Plenty New Zealand
Telephone	+64 7 5411221
Fax	+64 7 5411310
Website	www.altexcoatings.com
Email	neil.debenham@carboline.co.nz

Emergency telephone number

Association / Organisation	NZ POISONS (24hr 7 days)
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 preferred 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. Not regulated for transport of Dangerous Goods.

GHS Classification [1]	Chronic Aquatic Hazard Category 3, Respiratory Sensitizer Category 1, Serious Eye Damage Category 1, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3, Skin Corrosion/Irritation Category 1B
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	6.9 (respiratory), 8.2B, 6.5B (contact), 9.1C, 8.3A, 6.5A (respiratory)

Label elements

GHS label elements	
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SIGNAL WORD **DANGER**

Continued...

Carboguard 696 Part B

Hazard statement(s)

H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s) Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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Precautionary statement(s) Storage

P405	Store locked up.
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Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration
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SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64-17-5.	1-10	ethanol, denatured
64742-95-6.	1-10	naphtha petroleum, light aromatic solvent
1477-55-0	10.98	benzene-1,3-dimethanamine
71302-91-5	9.5	hydrocarbons, C9-unsaturated, polymers with phenol
1330-20-7	0.4	xylene
108-67-8	0.2	1,3,5-trimethyl benzene
95-63-6	0.6	1,2,4-trimethyl benzene
526-73-8	0.2	1,2,3-trimethyl benzene
98-82-8	0.2	isopropyl benzene - cumene
103-65-1	0.2	propylbenzene
90-72-2	1-10	2,4,6-tris[(dimethylamino)methyl]phenol
71074-89-0	0.39	bis[(dimethylamino)methyl]phenol
108-83-8	0.29	diisobutyl ketone
471-34-1	1	calcium carbonate
14808-60-7	0.4	graded sand
12068-56-3	12.6	aluminosilicate
1302-93-8	5	mullite

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ 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.

Continued...

Carboguard 696 Part B

	<ul style="list-style-type: none"> ▶ Transport to hospital, or doctor, without delay.
Ingestion	<ul style="list-style-type: none"> ▶ 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. ▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. ▶ Avoid giving milk or oils. ▶ Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to xylene:

- ▶ Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- ▶ Pulmonary absorption is rapid with about 60-65% retained at rest.
- ▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- ▶ Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ < 50 mm Hg or pCO₂ > 50 mm Hg) should be intubated.
- ▶ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- ▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- ▶ Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant	Index	Sampling Time	Comments
Methylhippu-ric acids in urine	1.5 gm/gm creatinine	End of shift	
	2 mg/min	Last 4 hrs of shift	

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

	<ul style="list-style-type: none"> ▶ Foam.
--	---

Special hazards arising from the substrate or mixture

Fire Incompatibility	<ul style="list-style-type: none"> ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
-----------------------------	--

Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible.

SECTION 6 ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Minor Spills	Environmental hazard - contain spillage.
Major Spills	Environmental hazard - contain spillage.

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

SECTION 7 HANDLING AND STORAGE**Precautions for safe handling**

Safe handling	<ul style="list-style-type: none"> ▶ DO NOT allow clothing wet with material to stay in contact with skin ▶ Electrostatic discharge may be generated during pumping - this may result in fire.
Other information	<ul style="list-style-type: none"> ▶ Store in original containers.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Metal can or drum ▶ Packaging as recommended by manufacturer.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Continued...

Carboguard 696 Part B

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	ethanol, denatured	Ethyl alcohol	1880 mg/m ³ / 1000 ppm	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	benzene-1,3-dimethanamine	m-Xylene a,a'-diamine	Not Available	Not Available	0.1 mg/m ³	Skin absorption
New Zealand Workplace Exposure Standards (WES)	xylene	Xylene (o-, m-, p-isomers)	217 mg/m ³ / 50 ppm	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	isopropyl benzene - cumene	Cumene	125 mg/m ³ / 25 ppm	375 mg/m ³ / 75 ppm	Not Available	Skin absorption
New Zealand Workplace Exposure Standards (WES)	diisobutyl ketone	Diisobutyl ketone	145 mg/m ³ / 25 ppm	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	calcium carbonate	Calcium carbonate	10 mg/m ³	Not Available	Not Available	2011 correction;The value for inhalable dust containing no asbestos and less than 1% free silica.
New Zealand Workplace Exposure Standards (WES)	graded sand	Silica-Crystalline, Quartz	0.2 Respirable dust mg/m ³	Not Available	Not Available	Not Available


EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
ethanol, denatured	Ethyl alcohol; (Ethanol)	Not Available	Not Available	Not Available
naphtha petroleum, light aromatic solvent	Aromatic hydrocarbon solvents; (High flash naphtha distillates; Solvent naphtha (petroleum), light aromatic)	3.1 ppm	34 ppm	410 ppm
xylene	Xylenes	Not Available	Not Available	Not Available
1,3,5-trimethyl benzene	Mesitylene; (1,3,5-Trimethylbenzene)	Not Available	Not Available	360 ppm
1,2,4-trimethyl benzene	Trimethylbenzene, 1,2,4-; (Pseudocumene)	Not Available	Not Available	360 ppm
1,2,3-trimethyl benzene	Trimethylbenzene, 1,2,3-	Not Available	Not Available	740 ppm
isopropyl benzene - cumene	Cumene; (Isopropyl benzene)	Not Available	Not Available	Not Available
propylbenzene	Propylbenzene, n-; (Isocumene)	1.1 ppm	12 ppm	2300 ppm
2,4,6-tris[(dimethylamino)methyl]phenol	Tris(dimethylaminomethyl)phenol, 2,4,6-	3.6 mg/m ³	40 mg/m ³	240 mg/m ³
diisobutyl ketone	Diisobutyl ketone	25 ppm	25 ppm	2000 ppm
calcium carbonate	Limestone; (Calcium carbonate; Dolomite)	27 mg/m ³	27 mg/m ³	1300 mg/m ³
calcium carbonate	Carbonic acid, calcium salt	45 mg/m ³	210 mg/m ³	1300 mg/m ³
graded sand	Silica, crystalline-quartz; (Silicon dioxide)	0.025 mg/m ³	0.025 mg/m ³	0.025 mg/m ³

Ingredient	Original IDLH	Revised IDLH
ethanol, denatured	15,000 ppm	3,300 [LEL] ppm
naphtha petroleum, light aromatic solvent	Not Available	Not Available
benzene-1,3-dimethanamine	Not Available	Not Available
hydrocarbons, C9-unsaturated, polymers with phenol	Not Available	Not Available
xylene	1,000 ppm	900 ppm
1,3,5-trimethyl benzene	Not Available	Not Available
1,2,4-trimethyl benzene	Not Available	Not Available
1,2,3-trimethyl benzene	Not Available	Not Available
isopropyl benzene - cumene	8,000 ppm	900 [LEL] ppm
propylbenzene	Not Available	Not Available
2,4,6-tris[(dimethylamino)methyl]phenol	Not Available	Not Available
bis[(dimethylamino)methyl]phenol	Not Available	Not Available
diisobutyl ketone	2,000 ppm	500 ppm
calcium carbonate	Not Available	Not Available
graded sand	N.E. / N.E.	50 mg/m ³
aluminosilicate	Not Available	Not Available
mullite	Not Available	Not Available

Carboguard 696 Part B

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
Hands/feet protection	▶ Wear chemical protective gloves, e.g. PVC.
Body protection	See Other protection below
Other protection	▶ Overalls.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

Carboguard 696 Part B

Material	CPI
BUTYL	C
BUTYL/NEOPRENE	C
HYPALON	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
PVDC/PE/PVDC	C
TEFLON	C
VITON	C

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Type AK-P Filter of sufficient capacity.

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

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	AK-AUS / Class1 P2	-
up to 50	1000	-	AK-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	AK-2 P2
up to 100	10000	-	AK-3 P2
100+			Airline**

* - Continuous Flow ** - Continuous-flow or positive pressure demand

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	off white viscous liquid		
Physical state	Liquid	Relative density (Water = 1)	0.82
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

Continued...

Carboguard 696 Part B

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)	2
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)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▶ Unstable in the 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 can cause respiratory irritation in some persons.
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 696 Part B	TOXICITY	IRRITATION
	Not Available	Not Available
ethanol, denatured	TOXICITY	IRRITATION
	Not Available	Not Available
naphtha petroleum, light aromatic solvent	TOXICITY	IRRITATION
	Inhalation (rat) LC50: >3670 ppm/8 h *	Nil reported
	Oral (rat) LD50: >5000 mg/kg *	Not Available
benzene-1,3-dimethanamine	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 2000 mg/kg	Eye (rabbit): 0.05 mg/24h SEVERE
	Inhalation (rat) LC50: 700 ppm/1h	Skin (rabbit): 0.75 mg/24h SEVERE
	Oral (rat) LD50: 930 mg/kg	Not Available
hydrocarbons, C9-unsaturated, polymers with phenol	TOXICITY	IRRITATION
	Dermal (Rat) LD50: >10 ml/kg *	Not Available
	Oral (Rat) LD50: 1200 mg/kg *	Not Available
	Oral (Rat) LD50: 6.27 ml/kg *	Not Available
xylene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 5000 ppm/4h	Eye (human): 200 ppm irritant
	Intraperitoneal (Mouse) LD50: 1548 mg/kg	Eye (rabbit): 5 mg/24h SEVERE
	Intraperitoneal (Rat) LD50: 2459 mg/kg	Eye (rabbit): 87 mg mild
	Oral (Mouse) LD50: 2119 mg/kg	Skin (rabbit):500 mg/24h moderate
Oral (rat) LD50: 4300 mg/kg		

Carboguard 696 Part B

	Subcutaneous (Rat) LD50: 1700 mg/kg	
	Not Available	Not Available
1,3,5-trimethyl benzene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 24000 mg/m ³ /4h	Eye (rabbit): 500 mg/24h mild
	Not Available	Skin (rabbit): 20 mg/24h moderate
	Not Available	Not Available
1,2,4-trimethyl benzene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 18000 mg/m ³ /4h	
	Not Available	Not Available
1,2,3-trimethyl benzene	TOXICITY	IRRITATION
		No data reported
	Not Available	Not Available
isopropyl benzene - cumene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12300 mg/kg	Eye (rabbit): 500 mg/24h mild
	Dermal (rabbit) LD50: 2000 mg/kg	Eye (rabbit): 86 mg mild
	Oral (rat) LD50: 1400 mg/kg	Skin (rabbit): 10 mg/24h mild
	Not Available	Skin (rabbit): 100 mg/24h moderate
	Not Available	Not Available
propylbenzene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 65000 ppm/2h	[Sax*]
	Oral (Mouse) LD50: 5200 mg/kg	
	Oral (Rat) LD50: 6040 mg/kg	
	Oral (Rat) LD50: 7500 mg/kg	
	Not Available	Not Available
2,4,6-tris[[dimethylamino)methyl]phenol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 1280 mg/kg	[Ciba]
	Inhalation (rat) LC50: >0.5 mg/l/1 hr.	[Rohm & Haas, Henkel]*
	Oral (rat) LD50: 1200 mg/kg	Eye (rabbit): 0.05 mg/24h - SEVERE
	Oral (rat) LD50: 2500 mg/kg *	Skin (rabbit): 2 mg/24h - SEVERE
	Not Available	Not Available
bis[[dimethylamino)methyl]phenol	TOXICITY	IRRITATION
	Not Available	Not Available
diisobutyl ketone	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 16000 mg/kg	Eye (human): 25 ppm/15min - mild
	Inhalation (rat) LC50: 1979 ppm/6h *	Eye (rabbit): 500 mg
	Oral (mouse) LD50: >3200 mg/kg *	Skin (g.pig): repeated - SEVERE
	Oral (rat) LD50: >3200 mg/kg *	Skin (g.pig): Strong *
	Oral (rat) LD50: 5750 mg/kg	Skin (rabbit): 10 mg/24h - mild
	Not Available	Skin (rabbit): 500 mg - mild
	Not Available	Not Available
calcium carbonate	TOXICITY	IRRITATION
	Oral (Rat) LD50: 6450 mg/kg	Eye (rabbit): 0.75 mg/24h - SEVERE
	Not Available	Skin (rabbit): 500 mg/24h-moderate
	Not Available	Not Available

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graded sand	TOXICITY	IRRITATION
	Not Available	Not Available
aluminosilicate	TOXICITY	IRRITATION
	Not Available	Not Available
mullite	TOXICITY	IRRITATION
	Not Available	Not Available

NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	For trimethylbenzenes: Absorption of 1,2,4-trimethylbenzene occurs after oral, inhalation, or dermal exposure. Inhalation (rat) TCLo: 1320 ppm/6h/90D-1 * [Devoe]
HYDROCARBONS, C9-UNSATURATED, POLYMERS WITH PHENOL	* Rutgers MSDS
XYLENE	Reproductive effector in rats
1,3,5-TRIMETHYL BENZENE	CHEMWATCH 12171 1,2,4-trimethylbenzene
1,2,4-TRIMETHYL BENZENE	CHEMWATCH 2325 1,3,5-trimethylbenzene
2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL	While it is difficult to generalise about the full range of potential health effects posed by exposure to the many different amine compounds, characterised by those used in the manufacture of polyurethane and polyisocyanurate foams, it is agreed that overexposure to the majority of these materials may cause adverse health effects.
DIISOBUTYL KETONE	[Eastman; * for mixed isomer, ** for 2,6-dimethyl-4-heptanone] NOEL = 400 ppm (12 exposures rat) * LOEL = 250 ppm (30 exposures, rat) ** NOEL = 125 ppm (" " ") *** - target organ; kidney LOEL = 2000 mg/kg/day (oral neurotoxicity; minor target organs - liver, kidney, stomach) ** NOEL = 2000 mg/kg (for neurotoxicity) ** Skin sensitisation (g.pig) - moderate *
CALCIUM CARBONATE	No evidence of carcinogenic properties. teratogenic effects.
ALUMINOSILICATE	Some aluminosilicates (eg. kyanite) have been named as equivocal tumorigens (RTECS criteria).
MULLITE	No data of toxicological significance identified in literature search.
Carboguard 696 Part B, BENZENE-1,3-DIMETHANAMINE	The following information refers to contact allergens as a group and may not be specific to this product.
ETHANOL, DENATURED, XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation.
1,3,5-TRIMETHYL BENZENE, 1,2,4-TRIMETHYL BENZENE, 1,2,3-TRIMETHYL BENZENE, ISOPROPYL BENZENE - CUMENE, PROPYLBENZENE, DIISOBUTYL KETONE, CALCIUM CARBONATE	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
1,3,5-TRIMETHYL BENZENE, 1,2,4-TRIMETHYL BENZENE	Other Toxicity data is available for
1,3,5-TRIMETHYL BENZENE, 1,2,4-TRIMETHYL BENZENE	CHEMWATCH 12172 1,2,3-trimethylbenzene
BIS[(DIMETHYLAMINO)METHYL]PHENOL, GRADED SAND, ALUMINOSILICATE	No significant acute toxicological data identified in literature search.

Acute Toxicity	☹	Carcinogenicity	☹
Skin Irritation/Corrosion	✔	Reproductivity	☹
Serious Eye Damage/Irritation	✔	STOT - Single Exposure	✔
Respiratory or Skin sensitisation	✔	STOT - Repeated Exposure	☹
Mutagenicity	☹	Aspiration Hazard	☹

Legend:
✔ – Data required to make classification available
✘ – Data available but does not fill the criteria for classification
☹ – Data Not Available to make classification

CMR STATUS

REPROTOXIN	xylylene ILO Chemicals in the electronics industry that have toxic effects on reproduction
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Carboguard 696 Part B

SKIN	benzene-1,3-dimethanamine	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption
	isopropyl benzene - cumene	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

May cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethanol, denatured	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
benzene-1,3-dimethanamine	HIGH	HIGH
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
1,3,5-trimethyl benzene	HIGH	HIGH
1,2,4-trimethyl benzene	LOW (Half-life = 56 days)	LOW (Half-life = 0.67 days)
1,2,3-trimethyl benzene	HIGH	HIGH
isopropyl benzene - cumene	HIGH	HIGH
propylbenzene	HIGH	HIGH
2,4,6-tris[(dimethylamino)methyl]phenol	HIGH	HIGH
diisobutyl ketone	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
ethanol, denatured	LOW (LogKOW = -0.31)
benzene-1,3-dimethanamine	LOW (BCF = 2.7)
xylene	MEDIUM (BCF = 740)
1,3,5-trimethyl benzene	LOW (BCF = 342)
1,2,4-trimethyl benzene	LOW (BCF = 275)
1,2,3-trimethyl benzene	LOW (BCF = 259)
isopropyl benzene - cumene	LOW (BCF = 35.5)
propylbenzene	LOW (LogKOW = 3.69)
2,4,6-tris[(dimethylamino)methyl]phenol	LOW (LogKOW = 0.773)
diisobutyl ketone	LOW (LogKOW = 2.5646)

Mobility in soil

Ingredient	Mobility
ethanol, denatured	HIGH (KOC = 1)
benzene-1,3-dimethanamine	LOW (KOC = 914.6)
1,3,5-trimethyl benzene	LOW (KOC = 703)
1,2,4-trimethyl benzene	LOW (KOC = 717.6)
1,2,3-trimethyl benzene	LOW (KOC = 732.5)
isopropyl benzene - cumene	LOW (KOC = 817.2)
propylbenzene	LOW (KOC = 955)
2,4,6-tris[(dimethylamino)methyl]phenol	LOW (KOC = 15130)
diisobutyl ketone	LOW (KOC = 60.12)

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / Packaging disposal	▸ Containers may still present a chemical hazard/ danger when empty.
	Ensure 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

Carboguard 696 Part B

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

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	naphtha petroleum, light aromatic solvent	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	xylene	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	1,3,5-trimethyl benzene	Y; X
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	1,2,4-trimethyl benzene	Y; X
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	1,2,3-trimethyl benzene	Y; X
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	isopropyl benzene - cumene	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	propylbenzene	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	diisobutyl ketone	Y

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
HSR002658	Surface Coatings and Colourants (Corrosive) Group Standard 2006

ethanol, denatured(64-17-5.) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
naphtha petroleum, light aromatic solvent(64742-95-6.) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)"
benzene-1,3-dimethanamine(1477-55-0) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)"
hydrocarbons, C9-unsaturated, polymers with phenol(71302-91-5) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)"
xylene(1330-20-7) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
1,3,5-trimethyl benzene(108-67-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
1,2,4-trimethyl benzene(95-63-6) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
1,2,3-trimethyl benzene(526-73-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
isopropyl benzene - cumene(98-82-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
propylbenzene(103-65-1) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
2,4,6-tris[(dimethylamino)methyl]phenol(90-72-2) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
bis[(dimethylamino)methyl]phenol(71074-89-0) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)"
diisobutyl ketone(108-83-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
calcium carbonate(471-34-1) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"

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graded sand(14808-60-7) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals"
aluminosilicate(12068-56-3) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)"
mullite(1302-93-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)"

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

SECTION 16 OTHER INFORMATION**Other information****Ingredients with multiple cas numbers**

Name	CAS No
naphtha petroleum, light aromatic solvent	25550-14-5., 64742-95-6.
hydrocarbons, C9-unsaturated, polymers with phenol	68512-30-1, 71302-91-5
diisobutyl ketone	108-83-8, 19549-80-5
calcium carbonate	1317-65-3, 13397-26-7, 146358-95-4, 15634-14-7, 198352-33-9, 459411-10-0, 471-34-1, 63660-97-9, 72608-12-9, 878759-26-3
mullite	1302-93-8, 61027-90-5

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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