Carboguard 635HAR Part A

Altex Coatings Ltd

Chemwatch: 9-42509 Version No: 1.2

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 4

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 635HAR Part A
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
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. Part A of a two pack epoxy coating

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		1	
Emergency telephone numbers	0800 764766			
Other emergency telephone numbers	0800 764766	1	1 1 1	

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]	Flammable Liquid Category 3, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Reproductive Toxicity Category 2, STOT - RE Category 2, Chronic Aquatic Hazard Category 3		
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	3.1C, 6.3A, 6.4A, 6.8B, 6.9B (inhalation), 9.1C		

Label elements

GHS label elements





SIGNAL WORD \

WARNING

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Hazard statement(s)

H226	Flammable liquid and vapour		
H315	Causes skin irritation		
H319	Causes serious eye irritation		
H361	Suspected of damaging fertility or the unborn child		
H373	May cause damage to organs through prolonged or repeated exposure		
H412	Harmful to aquatic life with long lasting effects		

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

Obtain special instructions before use.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Keep container tightly closed.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Precautionary statement(s): Response

,			
P308+P313	IF exposed or concerned: Get medical advice/attention.		
P321	Specific treatment (see advice on this label).		
P370+P378	In case of fire: Use to extinguish.		
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.		
P314	Get medical advice/attention if you feel unwell.		
P337+P313	If eye irritation persists: Get medical advice/attention.		
P302+P352	IF ON SKIN: Wash with plenty of water and soap		
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.		
P332+P313	If skin irritation occurs: Get medical advice/attention.		
P362+P364	Take off contaminated clothing and wash it before reuse.		

Precautionary statement(s): Storage

P403+P235	Store in a well-ventilated place.
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	10-20	silica crystalline - quartz	
25036-25-3	10-20	bisphenol A/ bisphenol A diglycidyl ether polymer	
25068-38-6	1-10	bisphenol A/ epichlorohydrin resin, liquid	
108-10-1	1-10	methyl isobutyl ketone	
1330-20-7	1-10	xylene	
1333-86-4	0-1	carbon black	

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:

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	 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 furnes, 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

Treat symptomatically.

- Manifestation of aluminium toxicity include hypercalcaemia, anaemia, Vitamin D refractory osteodystrophy and a progressive encephalopathy (mixed dysarthria-apraxia of speech, asterixis, tremulousness, myoclonus, dementia, focal seizures). Bone pain, pathological fractures and proximal myopathy can occur.
- Symptoms usually develop insidiously over months to years (in chronic renal failure patients) unless dietary aluminium loads are excessive.
- Serum aluminium levels above 60 ug/ml indicate increased absorption. Potential toxicity occurs above 100 ug/ml and clinical symptoms are present when levels exceed 200 ug/ml.
- Deferoxamine has been used to treat dialysis encephalopathy and osteomalacia. CaNa2EDTA is less effective in chelating aluminium. [Ellenhom and Barceloux: Medical Toxicology]

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

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

When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles

Fire/Explosion Hazard

Liquid and vapour are flammable.

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

▶ Containers, even those that have been emptied, may contain explosive vapours.

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Other information

Store in original containers in approved flammable liquid storage area.

Conditions for safe storage, including any incompatibilities

Suitable container

Packing as supplied by manufacturer.

Storage incompatibility

For aluminas (aluminium oxide):













- X Must not be stored together
- 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)	silica crystalline - quartz	Silica-Crystalline, Quartz	0.2 Respirable dust (mg/m3)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	methyl isobutyl ketone	Methyl isobutyl ketone	205 (mg/m3) / 50 (ppm)	307 (mg/m3) / 75 (ppm)	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	xylene	Xylene (o-, m-, p-isomers)	217 (mg/m3) / 50 (ppm)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	carbon black	Carbon black	3 (mg/m3)	Not Available	Not Available	2011 correction; Suspected carcinogen

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
silica crystalline - quartz	0.3(ppm)	0.3(ppm)	0.3(ppm)	50(ppm)
bisphenol A/ bisphenol A diglycidyl ether polymer	7.5(ppm)	25(ppm)	150(ppm)	500(ppm)
bisphenol A/ epichlorohydrin resin, liquid	125 / 50 / 4(ppm)	350 / 150 / 12.5(ppm)	500 / 100(ppm)	500(ppm)
methyl isobutyl ketone	75(ppm)	75(ppm)	500(ppm)	500(ppm)
xylene	100(ppm)	130(ppm)	920(ppm)	2500(ppm)
carbon black	3.5(ppm)	10.5(ppm)	17.5(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
silica crystalline - quartz	N.E.(mgm3)N.E.(ppm)	50(mgm3)
methyl isobutyl ketone	3,000(ppm)	500(ppm)
xylene	1,000(ppm)	900(ppm)
carbon black	N.E.(mgm3)N.E.(ppm)	1,750(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	Safety glasses with side shields.		
Skin protection	See Hand protection below		
Hand protection	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.		
Body protection	See Other protection below		
Other protection	Overalls.		
Thermal hazards			

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Glove selection is based on a modified presentation of the: Carboguard 635HAR Part A Not Available

* CPI - Chemwatch Performance Index

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 / Class 1 P2	-	AX-PAPR-AUS / Class 1 P2
up to 50 x ES	Air-line*	-	-
up to 100 x ES	-	AX-3 P2	-
100+ x ES	-	Air-line**	-

 * - Continuous-flow; $\ ^{\star\star}$ - 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	Coloured with Characteristic Odour		
Physical state	Liquid	Relative density (Water = 1)	1.78
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	484
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)	134	Molecular weight (g/mol)	Not Available
Flash point (°C)	25	Taste	Not Available
Evaporation rate	0.9	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.8	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.1	Volatile Component (%vol)	17
Vapour pressure (kPa)	0.57	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.6	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	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	All cases of acute oral barium poisoning in adults exhibit gastrointestinal disturbances as the initial symptoms.
Skin Contact	Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period.

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Eye	
Chronic	

Evidence exists, or practical experience predicts, that the material may cause 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.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Carboguard 635HAR Part A	TOXICITY	IRRITATION
	Not Available	Not Available
	TOXICITY	IRRITATION
silica crystalline - quartz		Υ
	Not Available	Not Available
	TOXICITY	IRRITATION
bisphenol A/ bisphenol A diglycidyl ether	Dermal (Rat) LD50: >2000 mg/kg *	1
polymer	Oral (Rat) LD50: >2000 mg/kg *	1 1 1
	Not Available	Not Available
	TOXICITY	IRRITATION
bisphenol A/ epichlorohydrin resin, liquid	Oral (rat) LD50: 11400 mg/kg	Eye (rabbit): 100mg - Mild
прин	Not Available	Not Available
	TOXICITY	IRRITATION
	Oral (rat) LD50: 2080 mg/kg	Eye (human): 200 ppm/15m
	Oral (rat) LD50: 2460 mg/kg	Eye (rabbit): 40 mg - SEVERE
methyl isobutyl ketone	3 3	Eye (rabbit): 500 mg/24h - mild
		Skin (rabbit): 500 mg/24h - mild
	Not Available	Not Available
	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
xylene	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
	TOXICITY	IRRITATION
carbon black	Dermal (rabbit) LD50: >3000 mg/kg	1
	Not Available	Not Available

SILICA CRYSTALLINE - QUARTZ	WARNING:		
BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER	*Hexion MSDS Epikote 1001		
METHYL ISOBUTYL KETONE	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.		
XYLENE	The material may produce severe irritation to the Reproductive effector in rats	e eye causing pronounced inflammation.	
CARBON BLACK	Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil I	eported	
Carboguard 635HAR Part A, CARBON BLACK	No significant acute toxicological data identifie	d in literature search.	
BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER, 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	Not Applicable	Carcinogenicity	Not Applicable

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	1	1	
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 2	Reproductivity	Reproductive Toxicity Category 2
Serious Eye Damage/Irritation	Eye Irritation Category 2A	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

Toxicity

Harmful 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 Legislation addressing waste disposal requirements may differ by country, state and/ or territory.	
	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 •3YE; •3Y

Land transport (UN)

UN number	1263		
Packing group			
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)		
Environmental hazard	No relevant data		
Transport hazard class(es)	Class 3 Subrisk		
Special precautions for user	Special provisions 163;223;367 limited quantity 5 L		

Air transport (ICAO-IATA / DGR)

UN number 1263	
Packing group III	
UN proper shipping name	Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
Environmental hazard	No relevant data

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		I	
	ICAO/IATA Class	3	
Transport hazard class(es)	ICAO / IATA Subrisk		
	ERG Code	3L	
	Special provisions		A3A72
Special precautions for user	Cargo Only Packing Instructions		366
	Cargo Only Maximum	Qty / Pack	220 L
	Passenger and Cargo	Packing Instructions	355
	Passenger and Cargo	Maximum Qty / Pack	60 L
	Passenger and Cargo Limited Quantity Packing Instructions		Y344
	Passenger and Cargo	Maximum Qty / Pack	10 L

Sea transport (IMDG-Code / GGVSee)

UN number	1263		
Packing group	III		
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)		
Environmental hazard	No relevant data		
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk		
Special precautions for user	EMS Number F-E,S-E Special provisions 163 223 955 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	
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2006	

	"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		
silica crystalline - quartz(14808-60-7) is	Not Approved by Governments","OECD List of High Production Volume (HPV) Chemicals","FisherTransport Information","Sigma-		
found on the following regulatory lists	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)"		

bisphenol A/ bisphenol A diglycidyl ether polymer(25036-25-3) is found on the following regulatory lists

"New Zealand Inventory of Chemicals (NZIoC)", "Sigma-AldrichTransport Information"

bisphenol A/ epichlorohydrin resin, liquid(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", "OSPAR National List of Candidates for Substitution – United Kingdom"

methyl isobutyl ketone(108-10-1) 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)", "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 - Dangerous Goods", "OECD List of High Production Volume (HPV) Chemicals", "International Fragrance Association (IFRA) Survey: Transparency List", "IOFI Global Reference List of Chemically Defined Substances", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "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 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 Pail - 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"

xylene(1330-20-7) 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)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "FisherTransport 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 Data", "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", "OECD List of High

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Production Volume (HPV) Chemicals","OSPAR List of Chemicals for Priority Action","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","IMO IBC Code Chapter 17: Summary of minimum requirements","GESAMP/EHS Composite List - GESAMP Hazard Profiles","IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods","WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "New Zealand Workplace Exposure Standards (WES)"

carbon black(1333-86-4) 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)", "OECD List of High Production Volume (HPV) Chemicals", "International Numbering System for Food Additives", "International Council of Chemical Associations (ICCA) - High Production Volume List", "New Zealand Cosmetic Products Group Standard - Schedule 6 Colouring Agents Cosmetic Products May Contain With Restrictions- Table 1: List fo Colouring Agents Allowed for use in Cosmetic Products", "Sigma-AldrichTransport Information", "Acros Transport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New Organisms (HSNO) Act - Classification Data", "New Zealand Bazardous Substances and New

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.

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Altex Coatings Ltd

Chemwatch: 9-42508 Version No: 1.2

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 4

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 635 Part B	
Chemical Name	Not Applicable	
Synonyms	Not Available	
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	
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. Part B of a two pack epoxy coating

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	1		
Emergency telephone numbers	0800 764766			
Other emergency telephone numbers	0800 764766	1 1 1	 	

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]	Flammable Liquid Category 3, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 3, Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Reproductive Toxicity Category 2, STOT - RE Category 2, Chronic Aquatic Hazard Category 4	
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	3.1C, 6.1C (dermal), 6.1D (oral), 6.5B (contact), 6.8B, 6.9B (inhalation), 8.2B, 8.3A, 9.1D	

Label elements

GHS label elements









SIGNAL WORD

DANGER

Chemwatch: 9-42508
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Hazard statement(s)

H226	Flammable liquid and vapour	
H302	Harmful if swallowed	
H311	Toxic in contact with skin	
H314	Causes severe skin burns and eye damage	
H318	Causes serious eye damage	
H317	May cause an allergic skin reaction	
H361	Suspected of damaging fertility or the unborn child	
H373	May cause damage to organs through prolonged or repeated exposure	
H413	May cause long lasting harmful effects to aquatic life	

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

Troductionary Statement(s). Frevention			
P201	Obtain special instructions before use.		
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.		
P233	Keep container tightly closed.		
P260	Do not breathe dust/fume/gas/mist/vapours/spray.		
P280	Wear protective gloves/protective clothing/eye protection/face protection.		
P270	Do not eat, drink or smoke when using this product.		
P273	Avoid release to the environment.		
P240	Ground/bond container and receiving equipment.		
P241	Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.		
P242	Use only non-sparking tools.		
P243	Take precautionary measures against static discharge.		
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).		
P370+P378	In case of fire: Use to extinguish.		
P302+P352	IF ON SKIN: Wash with plenty of water and soap		
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.		
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.		
P363	Wash contaminated clothing before reuse.		
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		

Precautionary statement(s): Storage

P403+P235	Store in a well-ventilated place.		
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
68413-28-5	30-40	cashew nut liquid/ formaldehyde/ ethylenediamine polymer
14808-60-7	20-30	silica crystalline - quartz
1330-20-7	10-20	xylene
71-36-3	1-10	n-butanol

90-72-2 1-10 Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol)

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. 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 poisons (where specific treatment regime is absent):

BASIC TREATMENT

Establish a patent airway with suction where necessary.

Watch for signs of respiratory insufficiency and assist ventilation as necessary.

Administer oxygen by non-rebreather mask at 10 to 15 L/min.

Monitor and treat, where necessary, for pulmonary oedema.

Monitor and treat, where necessary, for shock.

Anticipate seizures .

DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT

Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.

Positive-pressure ventilation using a bag-valve mask might be of use.

Monitor and treat, where necessary, for arrhythmias.

Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.

Drug therapy should be considered for pulmonary oedema.

Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.

Treat seizures with diazepam.

Proparacaine hydrochloride should be used to assist eye irrigation.

BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

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 intuited.
- 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.

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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

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

When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles.

Fire/Explosion Hazard

Combustion products include:

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

- Containers, even those that have been emptied, may contain explosive vapours.
- Other information
- Store in original containers in approved flame-proof area.

Conditions for safe storage, including any incompatibilities

Suitable container

Packing as supplied by manufacturer.

Storage incompatibility

Xylenes













- Must not be stored together
- 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)	silica crystalline - quartz	Silica-Crystalline, Quartz	0.2 Respirable dust (mg/m3)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	xylene	Xylene (o-, m-, p-isomers)	217 (mg/m3) / 50 (ppm)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-butanol	n-Butyl alcohol	Not Available	Not Available	150 (mg/m3) / 50 (ppm)	Skin absorption

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3

silica crystalline - quartz	0.3(ppm)	0.3(ppm)	0.3(ppm)	50(ppm)
xylene	100(ppm)	130(ppm)	920(ppm)	2500(ppm)
n-butanol	50(ppm)	50(ppm)	50(ppm)	1400(ppm)
Ancamine K54 (2,4,6- tris[(dimethylamino)methyl]phenol)	5(ppm)	15(ppm)	100(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
silica crystalline - quartz	N.E.(mgm3)N.E.(ppm)	50(mgm3)
xylene	1,000(ppm)	900(ppm)
n-butanol	8,000(ppm)	1,400 [LEL](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	▶ Overalls.
Thermal hazards	

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: Carboguard 635 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	KAX-AUS / Class 1 P2	-	KAX-PAPR-AUS / Class 1 P2
up to 50 x ES	Air-line*	-	-
up to 100 x ES	-	KAX-3 P2	-
100+ x ES	-	Air-line**	-

* - 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

ormation on Sadio physical and onomical proportion			
Appearance	Coloured with Characteristic Odour		
Physical state	Liquid	Relative density (Water = 1)	1.45
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	459
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)	133	Molecular weight (g/mol)	Not Available
Flash point (°C)	28	Taste	Not Available

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Evaporation rate	0.7	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	8.5	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.2	Volatile Component (%vol)	17
Vapour pressure (kPa)	0.58	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.4	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

Inhaled	Inhalation of epoxy resin amine hardener vapours (including polyamines and amine adducts) may produce bronchospasm and coughing episodes lasting days after cessation of the exposure.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	Skin contact with the material may produce toxic effects; systemic effects may result following absorption.
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.

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 635 Part B	TOXICITY	IRRITATION	
Carboguaru 055 r art b	Not Available	Not Available	
	TOXICITY	IRRITATION	
cashew nut liquid/ formaldehyde/ ethylenediamine polymer	Oral (rat) LD50: 1080 mg/kg		
carytoricalarimic polyrica	Not Available	Not Available	
	TOXICITY	IRRITATION	
silica crystalline - quartz		γ	
	Not Available	Not Available	
	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	
xylene	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	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: 3400 mg/kg	Eye (human): 50 ppm - irritant	
n butanal	Inhalation (rat) LC50: 8000 ppm/4h	Eye (rabbit): 1.6 mg-SEVERE	
n-butanol	Oral (rat) LD50: 790 mg/kg	Eye (rabbit): 24 mg/24h-SEVERE	
		Skin (rabbit): 405 mg/24h-moderate	
	Not Available	Not Available	
	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: 1280 mg/kg	[Ciba]	
Ancamine K54 (2,4,6- tris[(dimethylamino)methyl]phenol)	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	
	1,7,1,11,11,11,11,11,11,11,11,11,11,11,1		

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Oral (rat) LD50: 2500 mg/kg *	Skin (rabbit): 2 mg/24h - SEVERE
Not Available	Not Available

No significant acute toxicological data identified in literature search.
For cashew nutshell liquid (test substance Cardolite NX 4708 (distilled cashew nut shell liquid)
WARNING:
The material may produce severe irritation to the eye causing pronounced inflammation. Reproductive effector in rats
Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
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.

Acute Toxicity	Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 3 Carcinogenicity Not Applicable		Not Applicable		
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 1B	Corrosion/Irritation Category 1B Reproductivity Reproductive Toxicity Category 2			
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

SKIN	n-butanol	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
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



Version No: 1.2

Carboguard 635 Part B

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Marine Pollutant: NO HAZCHEM •3YE; •3Y

Land transport (UN)

UN number	1263
Packing group	III
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Environmental hazard	No relevant data
Transport hazard class(es)	Class 3 Subrisk
Special precautions for user	Special provisions 163;223;367 limited quantity 5 L

Air transport (ICAO-IATA / DGR)

UN number	1263			
ON number	1203			
Packing group	III			
UN proper shipping name	Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)			
Environmental hazard	No relevant data	No relevant data		
	ICAO/IATA Class	3		
Transport hazard class(es)	ICAO / IATA Subrisk	1		
	ERG Code	3L		
	Special provisions		A3A72	
	Cargo Only Packing Ir	nstructions	366	
	Cargo Only Maximum Qty / Pack		220 L	
Special precautions for user	Passenger and Cargo Packing Instructions		355	
	Passenger and Cargo Maximum Qty / Pack		60 L	
	Passenger and Cargo	Limited Quantity Packing Instructions	Y344	
	Passenger and Cargo Maximum Qty / Pack		10 L	

Sea transport (IMDG-Code / GGVSee)

UN number	1263		
Packing group	III		
UN proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)		
Environmental hazard	No relevant data		
Transport hazard class(es)	IMDG Class 3 IMDG Subrisk		
Special precautions for user	EMS Number F-E,S-E Special provisions 163 223 955 Limited Quantities 5 L		

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

Source	Ingredient	Pollution Category	Residual Concentration - Outside Special Area (% w/w)	Residual Concentration	
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances	n-butanol	Not Available	Not Available	Not Available	

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
HSR002623	N.O.S.

cashew nu	t liq	uid/ f	ormaldehyde/	1
ethylenediamine	pol	ymer	(68413-28-5) is	6

"New Zealand Inventory of Chemicals (NZIoC)"

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 silica crystalline - quartz(14808-60-7) is Not Approved by Governments", "OECD List of High Production Volume (HPV) Chemicals", "FisherTransport Information", "Sigmafound on the following regulatory lists 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)" "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","New Zealand Inventory of Chemicals (NZIoC)","International Council of Chemical Associations (ICCA) - High Production Volume List","International Fragrance Association (IFRA) Survey: Transparency List", "FisherTransport 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", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal xylene(1330-20-7) is found on the Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous following regulatory lists Goods List - RID 2013 (Dutch)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR List of Chemicals for Priority Action", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","IMO IBC Code Chapter 17: Summary of minimum requirements", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards", "New Zealand Hazardous Substances and New Organisms (HSNO) Act -Dangerous Goods", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinkingwater", "New Zealand Workplace Exposure Standards (WES)" "New Zealand Inventory of Chemicals (NZIoC)","IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "OECD List of High Production Volume (HPV) Chemicals", "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"."IMO IBC Code Chapter 18: List of products to which the Code does not apply", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "FisherTransport Information", "Sigma-AldrichTransport Information", "Acros Transport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single n-butanol(71-36-3) is found on the components)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous following regulatory lists 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", "IMO IBC Code Chapter 17: Summary of minimum requirements", "OSPAR National List of Candidates for Substitution - Norway' "New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New Ancamine K54 (2,4,6-Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act tris[(dimethylamino)methyl]phenol) Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals (90-72-2) is found on the following Classification Data", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods regulatory lists 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.

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