

# Carboguard 2929 Part A

Altex Coatings Ltd

Chemwatch: 9-42973

Version No: 1.2

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

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S.GHS.NZL.EN

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

### Product Identifier

Product name	Carboguard 2929 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 isocyanate free coating
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### Details of the supplier of the safety data sheet

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

### Emergency telephone number

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

### CHEMWATCH EMERGENCY RESPONSE

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

Once connected and if the message is not in your 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.**

GHS Classification <sup>[1]</sup>	Flammable Liquid Category 3, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Carcinogen Category 2, Reproductive Toxicity Category 1, 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, 6.5B (contact), 6.7B, 6.8A, 6.9B, 9.1C

### Label elements

GHS label elements	
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SIGNAL WORD	<b>DANGER</b>
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## Carboguard 2929 Part A

## Hazard statement(s)

H226	Flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H360	May damage 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

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.
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

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.
P302+P352	IF ON SKIN: Wash with plenty of water and soap
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.

## 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
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## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
123-86-4	1-30	<a href="#">n-butyl acetate</a>
1330-20-7	1-10	<a href="#">xylene</a>
108-65-6	0-10	<a href="#">propylene glycol monomethyl ether acetate, alpha-isomer</a>
763-69-9	1-10	<a href="#">ethyl-3-ethoxypropionate</a>
78-83-1	1-10	<a href="#">isobutanol</a>
100-41-4	1-10	<a href="#">ethylbenzene</a>
41556-26-7	<1	<a href="#">bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate</a>
64742-95-6	1-10	<a href="#">naphtha petroleum, light aromatic solvent</a>
1333-86-4	0-10	<a href="#">carbon black</a>

## Carboguard 2929 Part A

1332-58-7	0-20	<a href="#">Eckalite ED (kaolin)</a>
64742-82-1.	0.1	<a href="#">naphtha petroleum, heavy, hydrodesulfurised</a>

## SECTION 4 FIRST AID MEASURES

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

## Description of first aid measures

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ 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.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

## 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 simple esters:

## 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.
- ▶ **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.
- ▶ Give activated charcoal.

## 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.

## EMERGENCY DEPARTMENT

- ▶ Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- ▶ Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- ▶ Consult a toxicologist as necessary.

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 (pO<sub>2</sub> < 50 mm Hg or pCO<sub>2</sub> > 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):

## Carboguard 2929 Part A

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

▸ Alert Fire Brigade and tell them location and nature of hazard.

## 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.

## 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

Xylenes:



X



X



X



X



X



+

X — Must not be stored together

0 — May be stored together with specific precautions

+ — 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)	n-butyl acetate	n-Butyl acetate	713 (mg/m3) / 150 (ppm)	950 (mg/m3) / 200 (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)	isobutanol	Isobutyl alcohol	152 (mg/m3) / 50 (ppm)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	ethylbenzene	Ethyl benzene	434 (mg/m3) / 100 (ppm)	543 (mg/m3) / 125 (ppm)	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
New Zealand Workplace Exposure Standards (WES)	Eckalite ED (kaolin)	Kaolin	10 Inhalable dust; and 2 Respirable dust (mg/m3)	Not Available	Not Available	Not Available

**EMERGENCY LIMITS**

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
n-butyl acetate	5(ppm)	5(ppm)	200(ppm)	3000(ppm)
xylene	100(ppm)	130(ppm)	920(ppm)	2500(ppm)
propylene glycol monomethyl ether acetate, alpha-isomer	50(ppm)	150(ppm)	250(ppm)	600(ppm)
ethyl-3-ethoxypropionate	20(ppm)	60(ppm)	400(ppm)	500(ppm)
isobutanol	100(ppm)	1250(ppm)	1600(ppm)	1600(ppm)
ethylbenzene	100(ppm)	125(ppm)	125(ppm)	800(ppm)
naphtha petroleum, light aromatic solvent	500(ppm)	750(ppm)	750(ppm)	750(ppm)
carbon black	3.5(ppm)	10.5(ppm)	17.5(ppm)	500(ppm)
Eckalite ED (kaolin)	5(ppm)	6(ppm)	125(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
n-butyl acetate	10,000(ppm)	1,700 [LEL](ppm)
xylene	1,000(ppm)	900(ppm)
isobutanol	8,000(ppm)	1,600(ppm)
ethylbenzene	2,000(ppm)	800 [LEL](ppm)
carbon black	N.E. (mgm3)N.E. (ppm)	1,750(mgm3)

**Exposure controls**

<b>Appropriate engineering controls</b>	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
<b>Personal protection</b>	
<b>Eye and face protection</b>	▸ Safety glasses with side shields.
<b>Skin protection</b>	See Hand protection below
<b>Hand protection</b>	▸ Wear chemical protective gloves, e.g. PVC.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	▸ Overalls.
<b>Thermal hazards</b>	

**Recommended material(s)****GLOVE SELECTION INDEX**

Glove selection is based on a modified presentation of the:  
Carboguard 2929 Part A Not Available

Material	CPI

\* CPI - Chemwatch Performance Index

**Respiratory protection**

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	A-AUS / Class 1 P2	-	A-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	A-2 P2	A-PAPR-2 P2
up to 50 x ES	-	A-3 P2	-
50+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - 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(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

## Information on basic physical and chemical properties

<b>Appearance</b>	Coloured with Characteristic Odour		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.02 - 1.37
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	426
<b>pH (as supplied)</b>	Not Available	<b>Decomposition temperature</b>	Not Available
<b>Melting point / freezing point (°C)</b>	Not Available	<b>Viscosity (cSt)</b>	Not Available
<b>Initial boiling point and boiling range (°C)</b>	108 - 165	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	36	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	0.7	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Available	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	8.2	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	1.3	<b>Volatile Component (%vol)</b>	31
<b>Vapour pressure (kPa)</b>	0.8	<b>Gas group</b>	Not Available
<b>Solubility in water (g/L)</b>	Immiscible	<b>pH as a solution(1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	4	<b>VOC g/L</b>	Not Available

## SECTION 10 STABILITY AND REACTIVITY

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

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

<b>Inhaled</b>	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).
<b>Ingestion</b>	Following a single dose of isobutanol in rats, deaths were delayed for several days and hepatic degeneration was evident.
<b>Skin Contact</b>	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.
<b>Eye</b>	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.
<b>Chronic</b>	On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.

	TOXICITY	IRRITATION
<b>Carboguard 2929 Part A</b>	Not Available	Not Available
<b>n-butyl acetate</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 3200 mg/kg*	* [PPG]
	Inhalation (rat) LC50: 2000 ppm/4H	Eye (human): 300 mg
	Inhalation (Rat) LC50: 390 ppm/4h	Eye (rabbit): 20 mg (open)-SEVERE
	Intraperitoneal (Mouse) LD50: 1230 mg/kg	Eye (rabbit): 20 mg/24h - moderate
	Oral (Guinea pig) LD50: 4700 mg/kg	g
	Oral (Rabbit) LD50: 3200 mg/kg	Skin (rabbit): 500 mg/24h-moderate
	Oral (Rat) LD50: 10768 mg/kg	
	Oral (rat) LD50: 13100 mg/kg	
Not Available	Not Available	
<b>xylene</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (rat) LC50: 5000 ppm/4h	Eye (human): 200 ppm irritant
	Intraperitoneal (Mouse) LD50: 1548 mg/kg	Eye (rabbit): 5 mg/24h SEVERE

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	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
propylene glycol monomethyl ether acetate, alpha-isomer	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >5000 mg/kg*	* [CCINFO]
	Inhalation (rat) LC50: 4345 ppm/6h	Nil reported
	Oral (rat) LD50: 8532 mg/kg	
	Not Available	Not Available
ethyl-3-ethoxypropionate	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 10000 mg/kg	Eye (rabbit): 500mg/24h - mild
	Dermal (rabbit) LD50: 4076 mg/kg	Skin (rabbit):10 mg/24h open mild
	Inhalation (rat) LC50: 1250 ppm/4h	
	Oral (rat) LD50: 5000 mg/kg	
	Oral (rat) LD50: 5140 mg/kg	
	Not Available	Not Available
isobutanol	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 3400 mg/kg.	Eye (rabbit): 2 20 mg/24h-moderate
	Oral (rat) LD50: 2460 mg/kg.	Eye (rabbit): 2 mg/24h - SEVERE
		Skin (rabbit): mg (open)-SEVERE
	Not Available	Not Available
ethylbenzene	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 17800 mg/kg	Eye (rabbit): 500 mg - SEVERE
	Intraperitoneal (mouse) LD50: 2642 mg/kg	Skin (rabbit): 15 mg/24h mild
	Oral (rat) LD50: 3500 mg/kg	
	Not Available	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (rat) LD50: 3100 mg/kg *	*[Ameron]
	Not Available	Not Available
naphtha petroleum, light aromatic solvent	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (rat) LC50: >3670 ppm/8 h *	
	Oral (rat) LD50: >5000 mg/kg *	
	Not Available	Not Available
carbon black	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >3000 mg/kg	
	Not Available	Not Available
Eckalite ED (kaolin)	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
naphtha petroleum, heavy, hydrodesulfurised	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>XYLENE</b>	Reproductive effector in rats	
<b>PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE, ALPHA-ISOMER</b>	<p>for propylene glycol ethers (PGEs):</p> <p>A BASF report (in ECETOC ) showed that inhalation exposure to 545 ppm PGMEA (beta isomer) was associated with a teratogenic response in rabbits; but exposure to 145 ppm and 36 ppm had no adverse effects. The beta isomer of PGMEA comprises only 10% of the commercial material, the remaining 90% is alpha isomer.</p>	

ETHYL-3-ETHOXYPROPIONATE	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). * Union Carbide ** Endura Manufacturing
ISOBUTANOL	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
ETHYLBENZENE	Liver changes, uteral tract, effects on fertility, foetotoxicity, specific developmental abnormalities (musculoskeletal system) recorded.
NAPHTHA PETROLEUM, LIGHT AROMATIC SOLVENT	<b>for petroleum:</b> Inhalation (rat) TCLo: 1320 ppm/6h/90D-I * [Devoe]
CARBON BLACK	Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported
Carbguard 2929 Part A, BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE	The following information refers to contact allergens as a group and may not be specific to this product.
N-BUTYL ACETATE, XYLENE, ETHYLBENZENE	The material may produce severe irritation to the eye causing pronounced inflammation.
CARBON BLACK, ECKALITE ED (KAOLIN), NAPHTHA PETROLEUM, HEAVY, HYDRODESULFURISED	No significant acute toxicological data identified in literature search.

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

## CMR STATUS

## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

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

## SECTION 14 TRANSPORT INFORMATION

## Labels Required

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



## Carbguard 2929 Part A

## 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
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
Transport hazard class(es)	ICAO/IATA Class : 3 ICAO / IATA Subrisk : ERG Code : 3L
Special precautions for user	Special provisions : A3A72 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

## 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	isobutanol	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
HSR002669	Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006

n-butyl acetate(123-86-4) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "FisherTransport Information", "Sigma-AldrichTransport Information", "Acros Transport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Workplace Exposure Standards (WES)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods
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	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 MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO IBC Code Chapter 17: Summary of minimum requirements", "OECD List of High Production Volume (HPV) Chemicals", "IOFI Global Reference List of Chemically Defined Substances", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "OSPAR National List of Candidates for Substitution – Norway"
<b>xylene(1330-20-7) is found on the following regulatory lists</b>	"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 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 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)"
<b>propylene glycol monomethyl ether acetate, alpha-isomer(108-65-6) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "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 Council of Chemical Associations (ICCA) - High Production Volume List", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "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 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 MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "OSPAR National List of Candidates for Substitution – Norway"
<b>ethyl-3-ethoxypropionate(763-69-9) is found on the following regulatory lists</b>	"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 Council of Chemical Associations (ICCA) - High Production Volume List", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "FisherTransport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "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"
<b>isobutanol(78-83-1) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "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 Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "IOFI Global Reference List of Chemically Defined Substances", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "FisherTransport Information", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Workplace Exposure Standards (WES)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OSPAR National List of Candidates for Substitution – Norway"
<b>ethylbenzene(100-41-4) is found on the following regulatory lists</b>	"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 Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "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", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "FisherTransport Information", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Workplace Exposure Standards (WES)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OSPAR List of Chemicals for Priority Action"
<b>bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate(41556-26-7) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "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"
<b>naphtha petroleum, light aromatic solvent(64742-95-6.) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Chemical Secretariat (ChemSec) SIN List (*Substitute It Now!)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "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"
<b>carbon black(1333-86-4) is found on the following regulatory lists</b>	"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

## Carboguard 2929 Part A

	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 of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Workplace Exposure Standards (WES)"
<b>Eckalite ED (kaolin)(1332-58-7) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "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", "New Zealand Workplace Exposure Standards (WES)"
<b>naphtha petroleum, heavy, hydrodesulfurised(64742-82-1.) is found on the following regulatory lists</b>	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Chemical Secretariat (ChemSec) SIN List (*Substitute It Now!)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "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 List of Chemicals for Priority Action"

## 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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# Carboguard 2929 Part B

Altex Coatings Ltd

Chemwatch: 9-42974  
Version No: 1.2  
Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

Issue Date: 16/12/2013  
Print Date: 10/01/2014  
S.GHS.NZLEN

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

### Product Identifier

Product name	Carboguard 2929 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	Part B of a two pack isocyanate free coating
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### Details of the supplier of the safety data sheet

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

### Emergency telephone number

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

### CHEMWATCH EMERGENCY RESPONSE

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

Once connected and if the message is not in your 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.**

GHS Classification <sup>[1]</sup>	Flammable Liquid Category 2, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, 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	3.1B, 6.3A, 6.4A, 9.1C

### Label elements

GHS label elements	 
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SIGNAL WORD	DANGER
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### Hazard statement(s)

H225	Highly flammable liquid and vapour
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H315	Causes skin irritation
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

**Supplementary statement(s)**

Not Applicable

**Precautionary statement(s): Prevention**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P233	Keep container tightly closed.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.

**Precautionary statement(s): Response**

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.
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.
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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
123-86-4	40-50	<a href="#">n-butyl acetate</a>
2530-83-8	1-10	<a href="#">Dynasylan Glymo (gamma-glycidioxypropyltrimethoxysilane)</a>

**SECTION 4 FIRST AID MEASURES**

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

**Description of first aid measures**

<b>Eye Contact</b>	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with fresh running water.</li> <li>▶ 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.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> <li>▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>

**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 simple esters:

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.
- **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.
- Give activated charcoal.

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.

EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Consult a toxicologist as necessary.

BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For acute and short term repeated exposures to methanol:

- Toxicity results from accumulation of formaldehyde/formic acid.
- Clinical signs are usually limited to CNS, eyes and GI tract Severe metabolic acidosis may produce dyspnea and profound systemic effects which may become intractable. All symptomatic patients should have arterial pH measured. Evaluate airway, breathing and circulation.
- Stabilise obtunded patients by giving naloxone, glucose and thiamine.
- Decontaminate with Ipecac or lavage for patients presenting 2 hours post-ingestion. Charcoal does not absorb well; the usefulness of cathartic is not established.
- Forced diuresis is not effective; haemodialysis is recommended where peak methanol levels exceed 50 mg/dL (this correlates with serum bicarbonate levels below 18 mEq/L).
- Ethanol, maintained at levels between 100 and 150 mg/dL, inhibits formation of toxic metabolites and may be indicated when peak methanol levels exceed 20 mg/dL. An intravenous solution of ethanol in D5W is optimal.
- Folate, as leucovorin, may increase the oxidative removal of formic acid. 4-methylpyrazole may be an effective adjunct in the treatment. 8-Phenytoin may be preferable to diazepam for controlling seizure.

[Ellenhorn Barceloux: Medical Toxicology]

BIOLOGICAL EXPOSURE INDEX - BEI

Determinant	Index	Sampling Time	Comment
1. Methanol in urine	15 mg/l	End of shift	B, NS
2. Formic acid in urine	80 mg/gm creatinine	Before the shift at end of workweek	B, NS

B: Background levels occur in specimens collected from subjects **NOT** exposed.

NS: Non-specific determinant - observed following exposure to other materials.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Alcohol stable 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

- Liquid and vapour are highly flammable.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Minor Spills</b>	▶ Remove all ignition sources.
<b>Major Spills</b>	▶ 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

<b>Safe handling</b>	▶ Containers, even those that have been emptied, may contain explosive vapours.
<b>Other information</b>	▶ Store in original containers in approved flame-proof area.

### Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	▶ Packing as supplied by manufacturer.
<b>Storage incompatibility</b>	n-Butyl acetate:



+

X

X

X

X

+

**X** — Must not be stored together

**0** — May be stored together with specific preventions

**+** — May be stored together

### PACKAGE MATERIAL INCOMPATIBILITIES

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	n-butyl acetate	n-Butyl acetate	713 (mg/m <sup>3</sup> ) / 150 (ppm)	950 (mg/m <sup>3</sup> ) / 200 (ppm)	Not Available	Not Available

#### EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
n-butyl acetate	5(ppm)	5(ppm)	200(ppm)	3000(ppm)
Dynasylan Glymo (gamma-glycidoxypropyltrimethoxysilane)	150(ppm)	400(ppm)	500(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
n-butyl acetate	10,000(ppm)	1,700 [LEL](ppm)

### Exposure controls

<b>Appropriate engineering controls</b>	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
<b>Personal protection</b>	
<b>Eye and face protection</b>	▶ Safety glasses with side shields.
<b>Skin protection</b>	See Hand protection below
<b>Hand protection</b>	▶ Wear chemical protective gloves, e.g. PVC.
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	▶ Overalls.
<b>Thermal hazards</b>	

### Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

### Respiratory protection

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory



## Carboguard 2929 Part B

Carboguard 2929 Part B Not Available

Material	CPI
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\* CPI - Chemwatch Performance Index

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 5 x ES	A-AUS / Class 1 P2	-	A-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	A-2 P2	A-PAPR-2 P2
up to 50 x ES	-	A-3 P2	-
50+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face

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

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	1.00
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	421
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)	126	Molecular weight (g/mol)	Not Available
Flash point (°C)	22	Taste	Not Available
Evaporation rate	1.0	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.6	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.7	Volatile Component (%vol)	46
Vapour pressure (kPa)	1.3	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	4.0	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	The material has
Skin Contact	The material produces moderate skin irritation; evidence exists, or practical experience predicts, that the material either
Eye	Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.



<b>Chronic</b>	Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.	
<b>Carboguard 2929 Part B</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
<b>n-butyl acetate</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: 3200 mg/kg*	* [PPG]
	Inhalation (rat) LC50: 2000 ppm/4H	Eye (human): 300 mg
	Inhalation (Rat) LC50: 390 ppm/4h	Eye (rabbit): 20 mg (open)-SEVERE
	Intraperitoneal (Mouse) LD50: 1230 mg/kg	Eye (rabbit): 20 mg/24h - moderate
	Oral (Guinea pig) LD50: 4700 mg/kg	g
	Oral (Rabbit) LD50: 3200 mg/kg	Skin (rabbit): 500 mg/24h-moderate
	Oral (Rat) LD50: 10768 mg/kg	
	Oral (rat) LD50: 13100 mg/kg	
	Not Available	Not Available
<b>Dynasylan Glymo (gamma-glycidoxypropyltrimethoxysilane)</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (Rabbit) LD50: 3970 uL/kg	
	Oral (Rat) LD50: 22600 uL/kg	
	Not Available	Not Available

<b>Carboguard 2929 Part B</b>	No significant acute toxicological data identified in literature search.
<b>N-BUTYL ACETATE</b>	The material may produce severe irritation to the eye causing pronounced inflammation.
<b>DYNASYLAN GLYMO (GAMMA-GLYCIDOXYPROPYLTRIMETHOXSILANE)</b>	For alkoxysilanes:

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

<b>Product / Packaging disposal</b>	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	II
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 : 163,367 limited quantity : 5 L

## Air transport (ICAO-IATA / DGR)

UN number	1263
Packing group	II
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
Transport hazard class(es)	ICAO/IATA Class : 3 ICAO / IATA Subrisk : ERG Code : 3L
Special precautions for user	Special provisions : A3A72 Cargo Only Packing Instructions : 364 Cargo Only Maximum Qty / Pack : 60 L Passenger and Cargo Packing Instructions : 353 Passenger and Cargo Maximum Qty / Pack : 5 L Passenger and Cargo Limited Quantity Packing Instructions : Y341 Passenger and Cargo Maximum Qty / Pack : 1 L

## Sea transport (IMDG-Code / GGVSee)

UN number	1263
Packing group	II
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 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
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## Carbguard 2929 Part B

HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2006
<p><b>n-butyl acetate(123-86-4) is found on the following regulatory lists</b></p>	<p>"New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "FisherTransport Information", "Sigma-AldrichTransport Information", "Acros Transport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "New Zealand Workplace Exposure Standards (WES)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO IBC Code Chapter 17: Summary of minimum requirements", "OECD List of High Production Volume (HPV) Chemicals", "IOFI Global Reference List of Chemically Defined Substances", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "OSPAR National List of Candidates for Substitution – Norway"</p>
<p><b>Dynasylan Glymo (gamma-glycidoxypropyltrimethoxysilane) (2530-83-8) is found on the following regulatory lists</b></p>	<p>"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Council of Chemical Associations (ICCA) - High Production Volume List", "FisherTransport Information", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data"</p>

## 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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