

# Carboguard 888 Part A

RESENE PAINTS AUSTRALIA

Chemwatch: 9-42805

Version No: 1.7

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 3

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Initial Date: Not Available  
S.GHS.AUS.EN

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

### Product Identifier

Product name	Carboguard 888 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) (see 3.2.5 for relevant [AUST.] entries)
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
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### Details of the supplier of the safety data sheet

Registered company name	RESENE PAINTS AUSTRALIA
Address	7 Production Ave, Molendinar 4214 QLD Australia
Telephone	+61 7 55949522
Fax	+61 7 55126697
Website	Not Available
Email	Not Available

### Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	131126
Other emergency telephone numbers	131126

### CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
1800 039 008	+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

HAZARDOUS CHEMICAL.

Poisons Schedule	
GHS Classification <sup>[1]</sup>	Flammable Liquid Category 2, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Reproductive Toxicity Category 2, STOT-RE Category 2, Chronic Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

### Label elements

GHS label elements	
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SIGNAL WORD	DANGER
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## Carboguard 888 Part A

## Hazard statement(s)

H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
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

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.

## 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.
P314	Get medical advice/attention if you feel unwell.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
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.
P330	Rinse mouth.
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
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## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
25036-25-3	10-20	<a href="#">bisphenol A/ bisphenol A diglycidyl ether polymer</a>
Not Available	10-20	bisphenol A/ epichlorohydrin resin
1330-20-7	1-10	<a href="#">xylene</a>
108-88-3	1-10	<a href="#">toluene</a>
108-10-1	1-10	<a href="#">methyl isobutyl ketone</a>
Not Available	<1	urea/ formaldehyde resin butylated
71-36-3	<1	<a href="#">n-butanol</a>

## SECTION 4 FIRST AID MEASURES

## Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▶ Wash out immediately with fresh running water.
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Continued...

	<ul style="list-style-type: none"> <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>▶ <b>IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.</b></li> <li>▶ For advice, contact a Poisons Information Centre or a doctor.</li> <li>▶ Urgent hospital treatment is likely to be needed.</li> <li>▶ In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.</li> <li>▶ If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist.</li> <li>▶ If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the MSDS.</li> </ul> <p><b>Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:</b></p> <ul style="list-style-type: none"> <li>▶ <b>INDUCE</b> vomiting with fingers down the back of the throat, <b>ONLY IF CONSCIOUS</b>. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> </ul> <p><b>NOTE:</b> Wear a protective glove when inducing vomiting by mechanical means.</p>

**Indication of any immediate medical attention and special treatment needed**

	<p>for poisons (where specific treatment regime is absent):</p> <p>-----</p> <p><b>BASIC TREATMENT</b></p> <p>-----</p> <ul style="list-style-type: none"> <li>· Establish a patent airway with suction where necessary.</li> <li>· Watch for signs of respiratory insufficiency and assist ventilation as necessary.</li> <li>· Administer oxygen by non-rebreather mask at 10 to 15 L/min.</li> <li>· Monitor and treat, where necessary, for pulmonary oedema.</li> <li>· Monitor and treat, where necessary, for shock.</li> <li>· Anticipate seizures .</li> <li>· <b>DO NOT use emetics</b>. 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.</li> </ul> <p>-----</p> <p><b>ADVANCED TREATMENT</b></p> <p>-----</p> <ul style="list-style-type: none"> <li>· Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.</li> <li>· Positive-pressure ventilation using a bag-valve mask might be of use.</li> <li>· Monitor and treat, where necessary, for arrhythmias.</li> <li>· Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.</li> <li>· Drug therapy should be considered for pulmonary oedema.</li> <li>· Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.</li> <li>· Treat seizures with diazepam.</li> <li>· Proparacaine hydrochloride should be used to assist eye irrigation.</li> </ul> <p><i>BRONSTEIN, A.C. and CURRANCE, P.L.</i>  <b>EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994</b>  Treat symptomatically.</p> <p>For acute or short term repeated exposures to xylene:</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ Pulmonary absorption is rapid with about 60-65% retained at rest.</li> <li>▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure.</li> <li>▶ 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 &lt; 50 mm Hg or pCO2 &gt; 50 mm Hg) should be intubated.</li> <li>▶ 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.</li> <li>▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.</li> <li>▶ 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.</li> </ul> <p style="text-align: center;"><b>BIOLOGICAL EXPOSURE INDEX - BEI</b></p> <p>These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):</p> <table border="1"> <thead> <tr> <th>Determinant</th> <th>Index</th> <th>Sampling Time</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>Methylhippu-ric acids in urine</td> <td>1.5 gm/gm creatinine</td> <td>End of shift</td> <td></td> </tr> <tr> <td></td> <td>2 mg/min</td> <td>Last 4 hrs of shift</td> <td></td> </tr> </tbody> </table>	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	
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 highly 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 flame-proof area.

### Conditions for safe storage, including any incompatibilities

#### Suitable container

- ▶ Packing as supplied by manufacturer.

#### Storage incompatibility

Xylenes:

### 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
Australia Exposure Standards	xylene	Xylene (o-, m-, p-isomers)	350 (mg/m3) / 80 (ppm)	655 (mg/m3) / 150 (ppm)	Not Available	Not Available
Australia Exposure Standards	toluene	Toluene	191 (mg/m3) / 50 (ppm)	574 (mg/m3) / 150 (ppm)	Not Available	Not Available
Australia Exposure Standards	methyl isobutyl ketone	Methyl isobutyl ketone	205 (mg/m3) / 50 (ppm)	307 (mg/m3) / 75 (ppm)	Not Available	Not Available
Australia Exposure Standards	n-butanol	n-Butyl alcohol	Not Available	Not Available	152 (mg/m3) / 50 (ppm)	Not Available

#### EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
bisphenol A/ bisphenol A diglycidyl ether polymer	7.5(ppm)	25(ppm)	150(ppm)	500(ppm)
xylene	100(ppm)	130(ppm)	920(ppm)	2500(ppm)
toluene	200(ppm)	200(ppm)	510(ppm)	2900(ppm)
methyl isobutyl ketone	75(ppm)	75(ppm)	500(ppm)	500(ppm)
n-butanol	50(ppm)	50(ppm)	50(ppm)	1400(ppm)

Ingredient	Original IDLH	Revised IDLH
xylene	1,000(ppm)	900(ppm)
toluene	2,000(ppm)	500(ppm)
methyl isobutyl ketone	3,000(ppm)	500(ppm)
n-butanol	8,000(ppm)	1,400 [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>	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.
<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 888 Part A Not Available

Material	CPI

\* CPI - Chemwatch Performance Index

## Respiratory protection

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

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

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	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; \*\* - 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(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)

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

<b>Appearance</b>	Not Available		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.62
<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>	490
<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>	125	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	19	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	1.4	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Available	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	7.7	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	1.2	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	1.3	<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>	3.5	<b>VOC g/L</b>	

## SECTION 10 STABILITY AND REACTIVITY

## Carboguard 888 Part A

<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 either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models).
<b>Ingestion</b>	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
<b>Skin Contact</b>	Skin contact with the material may be harmful; systemic effects may result following absorption.
<b>Eye</b>	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
<b>Chronic</b>	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Carboguard 888 Part A	TOXICITY	IRRITATION
	Not Available	Not Available
bisphenol A/ bisphenol A diglycidyl ether polymer	TOXICITY	IRRITATION
	Dermal (Rat) LD50: >2000 mg/kg *	
	Oral (Rat) LD50: >2000 mg/kg *	
	Not Available	Not Available
xylene	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 5000 ppm/4h	Eye (human): 200 ppm irritant
	Intraperitoneal (Mouse) LD50: 1548 mg/kg	Eye (rabbit): 5 mg/24h SEVERE
	Intraperitoneal (Rat) LD50: 2459 mg/kg	Eye (rabbit): 87 mg mild
	Oral (Mouse) LD50: 2119 mg/kg	Skin (rabbit):500 mg/24h moderate
	Oral (rat) LD50: 4300 mg/kg	
	Subcutaneous (Rat) LD50: 1700 mg/kg	
Not Available	Not Available	
toluene	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg	Eye (rabbit): 2mg/24h - SEVERE
	Inhalation (rat) LC50: >26700 ppm/1h	Eye (rabbit):0.87 mg - mild
	Oral (rat) LD50: 636 mg/kg	Eye (rabbit):100 mg/30sec - mild
	Not Available	Skin (rabbit):20 mg/24h-moderate Skin (rabbit):500 mg - moderate
Not Available	Not Available	
methyl isobutyl ketone	TOXICITY	IRRITATION
	Oral (rat) LD50: 2080 mg/kg	Eye (human): 200 ppm/15m
	Oral (rat) LD50: 2460 mg/kg	Eye (rabbit): 40 mg - SEVERE Eye (rabbit): 500 mg/24h - mild
	Not Available	Skin (rabbit): 500 mg/24h - mild
Not Available	Not Available	
n-butanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 3400 mg/kg	Eye (human): 50 ppm - irritant
	Inhalation (rat) LC50: 8000 ppm/4h	Eye (rabbit): 1.6 mg-SEVERE
	Oral (rat) LD50: 790 mg/kg	Eye (rabbit): 24 mg/24h-SEVERE
	Not Available	Skin (rabbit): 405 mg/24h-moderate
Not Available	Not Available	

<b>Carboguard 888 Part A</b>	No significant acute toxicological data identified in literature search.
<b>BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER</b>	The following information refers to contact allergens as a group and may not be specific to this product. *Hexion MSDS Epikote 1001
<b>XYLENE</b>	The material may produce severe irritation to the eye causing pronounced inflammation. Reproductive effector in rats
<b>TOLUENE</b>	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).
<b>METHYL ISOBUTYL KETONE, N-BUTANOL</b>	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.

<b>Acute Toxicity</b>	Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 4	<b>Carcinogenicity</b>	Not Applicable
<b>Skin Irritation/Corrosion</b>	Not Applicable	<b>Reproductivity</b>	Reproductive Toxicity Category 2
<b>Serious Eye Damage/Irritation</b>	Not Applicable	<b>STOT - Single Exposure</b>	Not Applicable
<b>Respiratory or Skin sensitisation</b>	Not Applicable	<b>STOT - Repeated Exposure</b>	STOT - RE Category 2
<b>Mutagenicity</b>	Not Applicable	<b>Aspiration Hazard</b>	Not Applicable

**CMR STATUS**

<b>SKIN</b>	toluene	Australia Exposure Standards - Skin	Sk
	n-butanol	Australia Exposure Standards - Skin	Sk

**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>	► Containers may still present a chemical hazard/ danger when empty.
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**SECTION 14 TRANSPORT INFORMATION****Labels Required**

	
<b>Marine Pollutant</b>	NO
<b>HAZCHEM</b>	*3YE; *3Y

**Land transport (ADG)**

<b>UN number</b>	1263
<b>Packing group</b>	II
<b>UN proper shipping name</b>	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) (see 3.2.5 for relevant [AUST.] entries)

## Carboguard 888 Part A

<b>Environmental hazard</b>	No relevant data
<b>Transport hazard class(es)</b>	Class : 3 Subrisk :
<b>Special precautions for user</b>	Special provisions : 163 * limited quantity : 5 L

## Air transport (ICAO-IATA / DGR)

<b>UN number</b>	1263
<b>Packing group</b>	II
<b>UN proper shipping name</b>	Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
<b>Environmental hazard</b>	No relevant data
<b>Transport hazard class(es)</b>	ICAO/IATA Class : 3 ICAO / IATA Subrisk : ERG Code : 3L
<b>Special precautions for user</b>	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)

<b>UN number</b>	1263
<b>Packing group</b>	II
<b>UN proper shipping name</b>	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)
<b>Environmental hazard</b>	No relevant data
<b>Transport hazard class(es)</b>	IMDG Class : 3 IMDG Subrisk :
<b>Special precautions for user</b>	EMS Number : F-E,S-E Special provisions : 163 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

<b>bisphenol A/ bisphenol A diglycidyl ether polymer(25036-25-3) is found on the following regulatory lists</b>	"Sigma-AldrichTransport Information"
<b>xylylene(1330-20-7) is found on the following regulatory lists</b>	"International Maritime Dangerous Goods Requirements (IMDG Code)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "OSPAR List of Chemicals for Priority Action", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "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", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "FisherTransport Information", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OECD List of High Production Volume (HPV) Chemicals", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix I", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "Australia - Australian Capital Territory - Environment Protection



	<p>Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "Australia National Pollutant Inventory", "Australia High Volume Industrial Chemical List (HVICL)", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)"</p>
<p><b>toluene(108-88-3) is found on the following regulatory lists</b></p>	<p>"International Maritime Dangerous Goods Requirements (IMDG Code)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Customs (Prohibited Exports) Regulations 1958 - Schedule 9 Precursor substances - Part 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Illicit Drug Reagents/Essential Chemicals - Category III", "United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II", "OSPAR List of Chemicals for Priority Action", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "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", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "FisherTransport Information", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OECD List of High Production Volume (HPV) Chemicals", "International Fragrance Association (IFRA) Standards Prohibited", "Australia Drinking Water Guideline Values For Physical and Chemical Characteristics", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix I", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm (Aquatic habitat)", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "Australia National Pollutant Inventory", "Australia - Australian Capital Territory - Environment Protection Regulation: Pollutants entering waterways taken to cause environmental harm - Domestic water supply quality", "Australia High Volume Industrial Chemical List (HVICL)", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (AQUA/1 to 6 - non-pesticide anthropogenic organics)", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "United Nations List of Precursors and Chemicals Frequently used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control (Red List) - Table II", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 7", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes", "Australia - Australian Capital Territory - Environment Protection Regulation: Ambient environmental standards (Domestic water supply - organic compounds)"</p>
<p><b>methyl isobutyl ketone(108-10-1) is found on the following regulatory lists</b></p>	<p>"International Maritime Dangerous Goods Requirements (IMDG Code)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IOFI Global Reference List of Chemically Defined Substances", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "FisherTransport Information", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OSPAR National List of Candidates for Substitution - Norway", "OECD List of High Production Volume (HPV) Chemicals", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"</p>
<p><b>n-butanol(71-36-3) is found on the following regulatory lists</b></p>	<p>"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "IOFI Global Reference List of Chemically Defined Substances", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "FisherTransport Information", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OSPAR National List of Candidates for Substitution - Norway", "OECD List of High Production Volume (HPV) Chemicals", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "Australia High Volume Industrial Chemical List (HVICL)", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"</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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# Carboguard 888 Part B

## RESENE PAINTS AUSTRALIA

Chemwatch: 9-42813

Version No: 1.6

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 3

Issue Date: 12/12/2013

Print Date: 07/02/2014

Initial Date: Not Available

S.GHS.AUS.EN

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

### Product Identifier

Product name	Carboguard 888 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) (see 3.2.5 for relevant [AUST.] entries)
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
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### Details of the supplier of the safety data sheet

Registered company name	RESENE PAINTS AUSTRALIA
Address	7 Production Ave, Molendinar 4214 QLD Australia
Telephone	+61 7 55949522
Fax	+61 7 55126697
Website	Not Available
Email	Not Available

### Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	131126
Other emergency telephone numbers	131126

### CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
1800 039 008	+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

HAZARDOUS CHEMICAL.

Poisons Schedule	
GHS Classification <sup>[1]</sup>	Flammable Liquid Category 2, Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Carcinogen Category 2, Reproductive Toxicity Category 2, STOT - RE Category 1, Chronic Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

### Label elements

GHS label elements	
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SIGNAL WORD	DANGER
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## Carboguard 888 Part B

## Hazard statement(s)

H225	Highly flammable liquid and vapour
H315	Causes skin irritation
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes 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.
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

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.
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
64-17-5	10-20	<a href="#">alcohol, denatured</a>
27138-31-4	1-10	<a href="#">dipropylene glycol dibenzoate</a>
Not Available	1-10	isopropanol
Not Available	1-10	xylene
67-56-1	<1	<a href="#">methanol</a>
90-72-2	<1	<a href="#">Ancamine K54 (2,4,6-tris(dimethylamino)methylphenol)</a>

## SECTION 4 FIRST AID MEASURES

## Carboguard 888 Part B

## 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>▶ Immediately hold eyelids apart and flush the eye continuously with 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>▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>▶ Transport to hospital or doctor without delay.</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

	<p>Treat symptomatically.</p> <p>For acute or short term repeated exposures to xylene:</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ Pulmonary absorption is rapid with about 60-65% retained at rest.</li> <li>▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure.</li> <li>▶ 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> &lt; 50 mm Hg or pCO<sub>2</sub> &gt; 50 mm Hg) should be intubated.</li> <li>▶ 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.</li> <li>▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.</li> <li>▶ 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.</li> </ul> <p style="text-align: center;">BIOLOGICAL EXPOSURE INDEX - BEI</p> <p>These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Determinant</th> <th>Index</th> <th>Sampling Time</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Methylhippu-ric acids in urine</td> <td>1.5 gm/gm creatinine</td> <td>End of shift</td> <td></td> </tr> <tr> <td>2 mg/min</td> <td>Last 4 hrs of shift</td> <td></td> </tr> </tbody> </table> <p>For acute and short term repeated exposures to methanol:</p> <ul style="list-style-type: none"> <li>▶ Toxicity results from accumulation of formaldehyde/formic acid.</li> <li>▶ 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.</li> <li>▶ Stabilise obtunded patients by giving naloxone, glucose and thiamine.</li> <li>▶ Decontaminate with Ipecac or lavage for patients presenting 2 hours post-ingestion. Charcoal does not absorb well; the usefulness of cathartic is not established.</li> <li>▶ 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).</li> <li>▶ 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.</li> <li>▶ 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.</li> </ul> <p style="text-align: center;">[Ellenhorn Barceloux: Medical Toxicology]</p> <p style="text-align: center;">BIOLOGICAL EXPOSURE INDEX - BEI</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Determinant</th> <th>Index</th> <th>Sampling Time</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>1. Methanol in urine</td> <td>15 mg/l</td> <td>End of shift</td> <td>B, NS</td> </tr> <tr> <td>2. Formic acid in urine</td> <td>80 mg/gm creatinine</td> <td>Before the shift at end of workweek</td> <td>B, NS</td> </tr> </tbody> </table> <p>B: Background levels occur in specimens collected from subjects <b>NOT</b> exposed.</p> <p>NS: Non-specific determinant - observed following exposure to other materials.</p>	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		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
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2. Formic acid in urine	80 mg/gm creatinine	Before the shift at end of workweek	B, NS																					

## SECTION 5 FIREFIGHTING MEASURES

## Extinguishing media

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

► Avoid reaction with oxidising agents

**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
Australia Exposure Standards	alcohol, denatured	Ethyl alcohol	1880 (mg/m <sup>3</sup> ) / 1000 (ppm)	Not Available	Not Available	Not Available
Australia Exposure Standards	methanol	Methyl alcohol	262 (mg/m <sup>3</sup> ) / 200 (ppm)	328 (mg/m <sup>3</sup> ) / 250 (ppm)	Not Available	Not Available

**EMERGENCY LIMITS**

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
alcohol, denatured	1000(ppm)	3000(ppm)	3300(ppm)	3300(ppm)
methanol	200(ppm)	530(ppm)	2100(ppm)	7200(ppm)
Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol)	5(ppm)	15(ppm)	100(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
alcohol, denatured	15,000(ppm)	3,300 [LEL](ppm)
methanol	25,000(ppm)	6,000(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**

► Safety glasses with side shields.

**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)

Respiratory protection

## Carboguard 888 Part B

## GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:  
Carboguard 888 Part B Not Available

Material	CPI
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\* CPI - Chemwatch Performance Index

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

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

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

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	1.53
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	406
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)	81	Molecular weight (g/mol)	Not Available
Flash point (°C)	14	Taste	Not Available
Evaporation rate	2.5	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	18.4	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	3.2	Volatile Component (%vol)	24
Vapour pressure (kPa)	5.6	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	1.7	VOC g/L	

## 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	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.
Eye	When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.

## Carboguard 888 Part B

<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.	
<b>Carboguard 888 Part B</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>alcohol, denatured</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>dipropylene glycol dibenzoate</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >2000 mg/kg * Inhalation (rat) LC50: >200 mg/l/4h * Oral (rat) LD50: 4673 mg/kg * Not Available	<b>IRRITATION</b> * [Van Waters & Rogers]  Not Available
<b>methanol</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: 15800 mg/kg Inhalation (rat) LC50: 64000 ppm/4h Oral (rat) LD50: 5628 mg/kg Not Available	<b>IRRITATION</b> Eye (rabbit): 100 mg/24h-moderate Eye (rabbit): 40 mg-moderate Skin (rabbit): 20 mg/24 h-moderate Not Available
<b>Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol)</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: 1280 mg/kg Inhalation (rat) LC50: >0.5 mg/l/1 hr. Oral (rat) LD50: 1200 mg/kg Oral (rat) LD50: 2500 mg/kg * Not Available	<b>IRRITATION</b> [Ciba] [Rohm & Haas, Henkel]* Eye (rabbit): 0.05 mg/24h - SEVERE Skin (rabbit): 2 mg/24h - SEVERE Not Available

<b>Carboguard 888 Part B</b>	No significant acute toxicological data identified in literature search.
<b>ALCOHOL, DENATURED</b>	The material may produce severe irritation to the eye causing pronounced inflammation.
<b>METHANOL</b>	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).
<b>ANCAMINE K54 (2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL)</b>	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.

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

## CMR STATUS

<b>SKIN</b>	methanol	Australia Exposure Standards - Skin	Sk
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## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

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

## Persistence and degradability

<b>Ingredient</b>	<b>Persistence: Water/Soil</b>	<b>Persistence: Air</b>
Not Available	Not Available	Not Available

## Bioaccumulative potential

<b>Ingredient</b>	<b>Bioaccumulation</b>
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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.

**SECTION 14 TRANSPORT INFORMATION****Labels Required**

	
Marine Pollutant	NO
HAZCHEM	*3YE; *3Y

**Land transport (ADG)**

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) (see 3.2.5 for relevant [AUST.] entries)
Environmental hazard	No relevant data
Transport hazard class(es)	Class : 3 Subrisk :
Special precautions for user	Special provisions : 163 * 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 :



## 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	alcohol, denatured	Not Available	Not Available	Not Available
IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances	methanol	Not Available	Not Available	Not Available

## SECTION 15 REGULATORY INFORMATION

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

<p><b>alcohol, denatured(64-17-5) is found on the following regulatory lists</b></p>	<p>"World Anti-Doping Agency - The 2012 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports", "International Maritime Dangerous Goods Requirements (IMDG Code)", "IOFI Global Reference List of Chemically Defined Substances", "International Council of Chemical Associations (ICCA) - High Production Volume List", "World Anti-Doping Agency - The 2009 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports (French)", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "World Anti-Doping Agency - The 2009 Prohibited List World Anti-Doping Code - Substances Prohibited in Particular Sports (Korean)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "FisherTransport Information", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OSPAR National List of Candidates for Substitution - Norway", "OECD List of High Production Volume (HPV) Chemicals", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix B (Part 3)", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "World Anti-Doping Agency - The 2009 Prohibited List World Anti-Doping Code - Substances Prohibited in Competition (German)", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "Australia High Volume Industrial Chemical List (HVICL)", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "FEMA Generally Recognized as Safe (GRAS) Flavoring Substances 23 - Examples of FEMA GRAS Substances with Non-Flavor Functions", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"</p>
<p><b>dipropylene glycol dibenzoate(27138-31-4) is found on the following regulatory lists</b></p>	<p>"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OECD List of High Production Volume (HPV) Chemicals", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"</p>
<p><b>methanol(67-56-1) is found on the following regulatory lists</b></p>	<p>"IMDG Code - Medical First Aid Guide for use in accidents involving Dangerous Goods (MFAG) - Appendix 15 List Of Substances", "International Maritime Dangerous Goods Requirements (IMDG Code)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia - Tasmania - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals", "Australia Exposure Standards", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "FisherTransport Information", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "Australia - Northern Territories Work Health and Safety National Uniform Legislation Regulations- Restricted hazardous chemicals", "OSPAR National List of Candidates for Substitution - Norway", "OECD List of High Production Volume (HPV) Chemicals", "Australia - South Australia - Work Health and Safety Regulations 2012 - Restricted hazardous chemicals", "Australia - Queensland Work Health and Safety Regulation - Restricted hazardous chemicals", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "Australia High Volume Industrial Chemical List (HVICL)", "Australia - New South Wales - Work Health and Safety Regulation 2011 Restricted hazardous chemicals", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "Australia Work Health and Safety Regulations 2011 - Restricted hazardous chemicals", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes", "Australia - New South Wales Hazardous Substances Prohibited for Specific Uses"</p>
<p><b>Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol) (90-72-2) is found on the following regulatory lists</b></p>	<p>"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Australia - Victoria Occupational Health and Safety Regulations - Schedule 9: Materials at Major Hazard Facilities (And Their Threshold Quantity) Table 2", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OECD List of High Production Volume (HPV) Chemicals", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "Australia National Pollutant Inventory", "Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (English)", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "Australia Hazardous Substances Information System - Consolidated Lists", "Australia - New South Wales Protection of the Environment Operations (Waste) Regulation 2005 - Characteristics of trackable wastes"</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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