

Carbozinc 859EZ2 Part A

ALTEX COATINGS LTD

Chemwatch: 9-43139

Version No: 1.4

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 4

Issue Date: 18/12/2013

Print Date: 10/01/2014

S.GHS.NZL.EN

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

Product Identifier

Product name	Carbozinc 859EZ2 Part A
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

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

Relevant identified uses	Use according to manufacturer's directions. Part A of a two pack epoxy zinc coating
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Details of the supplier of the safety data sheet

Registered company name	ALTEX COATINGS LTD
Address	91-111 Oropi Road 3112 Bay of Plenty New Zealand
Telephone	+64 7 5411974
Fax	+64 7 5411310
Website	Not Available
Email	neil.debenham@carboline.co.nz

Emergency telephone number

Association / Organisation	NZ Poisons Centre (0800-1630hr Mon-Fri)
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 ^[1]	Flammable Liquid Category 3, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Skin Sensitizer Category 1, Reproductive Toxicity Category 2, STOT - RE Category 2, Chronic Aquatic Hazard Category 1
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), 6.8B, 6.9B, 9.1A

Label elements

GHS label elements	
SIGNAL WORD	WARNING

Hazard statement(s)

H226	Flammable liquid and vapour
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic 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.
P391	Collect spillage.
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
Not Available	70-80	zinc powder
25036-25-3	10-20	bisphenol A/ bisphenol A diglycidyl ether polymer
123-86-4	1-10	n-butyl acetate
27138-31-4	1-10	dipropylene glycol dibenzoate
Not Available	1-10	bisphenol A/ epichlorohydrin resin
1330-20-7	<1	xylene
71-36-3	<1	n-butanol
108-88-3	<1	toluene

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Immediately hold eyelids apart and flush the eye continuously with running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary.
Ingestion	<ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

	<p>Copper, magnesium, aluminium, antimony, iron, manganese, nickel, zinc (and their compounds) in welding, brazing, galvanising or smelting operations all give rise to thermally produced particulates of smaller dimension than may be produced if the metals are divided mechanically. Where insufficient ventilation or respiratory protection is available these particulates may produce "metal fume fever" in workers from an acute or long term exposure.</p> <ul style="list-style-type: none"> ▶ Onset occurs in 4-6 hours generally on the evening following exposure. Tolerance develops in workers but may be lost over the weekend. (Monday Morning Fever) ▶ Pulmonary function tests may indicate reduced lung volumes, small airway obstruction and decreased carbon monoxide diffusing capacity but these abnormalities resolve after several months. ▶ Although mildly elevated urinary levels of heavy metal may occur they do not correlate with clinical effects. ▶ The general approach to treatment is recognition of the disease, supportive care and prevention of exposure. ▶ Seriously symptomatic patients should receive chest x-rays, have arterial blood gases determined and be observed for the development of tracheobronchitis and pulmonary edema. <p>[Ellenhorn and Barceloux: Medical Toxicology]</p> <ul style="list-style-type: none"> ▶ Absorption of zinc compounds occurs in the small intestine. ▶ The metal is heavily protein bound. ▶ Elimination results primarily from faecal excretion. ▶ The usual measures for decontamination (Ipecac Syrup, lavage, charcoal or cathartics) may be administered, although patients usually have sufficient vomiting not to require them. ▶ CaNa₂EDTA has been used successfully to normalise zinc levels and is the agent of choice. <p>[Ellenhorn and Barceloux: Medical Toxicology]</p> <p>For acute or short term repeated exposures to xylene:</p> <ul style="list-style-type: none"> ▶ Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal. ▶ Pulmonary absorption is rapid with about 60-65% retained at rest. ▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure. ▶ Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ < 50 mm Hg or pCO₂ > 50 mm Hg) should be intubated. ▶ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance. ▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax. ▶ Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice. <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%; border-collapse: collapse;"> <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

	▶ DO NOT
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Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Reacts with acids producing flammable / explosive hydrogen (H ₂) gas
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Advice for firefighters

Fire Fighting	▶ Alert Fire Brigade and tell them location and nature of hazard.
Fire/Explosion Hazard	▶ DO NOT

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	▶ CARE
Storage incompatibility	▶ WARNING: Avoid or control reaction with peroxides.



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/m ³) / 150 (ppm)	950 (mg/m ³) / 200 (ppm)	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	xylene	Xylene (o-, m-, p-isomers)	217 (mg/m ³) / 50 (ppm)	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-butanol	n-Butyl alcohol	Not Available	Not Available	150 (mg/m ³) / 50 (ppm)	Skin absorption
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene	188 (mg/m ³) / 50 (ppm)	Not Available	Not Available	Skin absorption

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)
n-butyl acetate	5(ppm)	5(ppm)	200(ppm)	3000(ppm)
xylene	100(ppm)	130(ppm)	920(ppm)	2500(ppm)
n-butanol	50(ppm)	50(ppm)	50(ppm)	1400(ppm)
toluene	200(ppm)	200(ppm)	510(ppm)	2900(ppm)

Ingredient	Original IDLH	Revised IDLH
n-butyl acetate	10,000(ppm)	1,700 [LEL](ppm)
xylene	1,000(ppm)	900(ppm)
n-butanol	8,000(ppm)	1,400 [LEL](ppm)
toluene	2,000(ppm)	500(ppm)

Exposure controls

Appropriate engineering controls	Metal dusts must be collected at the source of generation as they are potentially explosive.
Personal protection	
Eye and face protection	► Safety glasses with side shields.
Skin protection	See Hand protection below
Hand protection	NOTE:
Body protection	See Other protection below
Other protection	► Overalls.
Thermal hazards	

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

Glove selection is based on a modified presentation of the:
Carbozinc 859EZ2 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	AX-AUS / Class 1 P2	-	AX-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	AX-2 P2	AX-PAPR-2 P2
up to 50 x ES	-	AX-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	Coloured with Characteristic Odour		
Physical state	Liquid	Relative density (Water = 1)	3.00
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	435
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)	127	Molecular weight (g/mol)	Not Available
Flash point (°C)	24	Taste	Not Available
Evaporation rate	1.0	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.7	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.6	Volatile Component (%vol)	6
Vapour pressure (kPa)	1.2	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.9	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	Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation.
Ingestion	The material has
Skin Contact	The material may accentuate any pre-existing dermatitis condition
Eye	It has either been demonstrated or it is expected that when the material is applied to the eye(s) of animals, it produces severe ocular lesions which are present twenty-four hours or more after instillation.
Chronic	Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals.

	TOXICITY	IRRITATION
Carbozinc 859EZ2 Part A	Not Available	Not Available
bisphenol A/ bisphenol A diglycidyl ether polymer	Dermal (Rat) LD50: >2000 mg/kg *	
	Oral (Rat) LD50: >2000 mg/kg *	
	Not Available	Not Available
n-butyl acetate	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
dipropylene glycol dibenzoate	Dermal (rabbit) LD50: >2000 mg/kg *	* [Van Waters & Rogers]
	Inhalation (rat) LC50: >200 mg/l/4h *	
	Oral (rat) LD50: 4673 mg/kg *	
	Not Available	Not Available
xylylene	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
n-butanol	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
		Skin (rabbit): 405 mg/24h-moderate
	Not Available	Not Available

	TOXICITY	IRRITATION
	toluene	Dermal (rabbit) LD50: 12124 mg/kg
Inhalation (rat) LC50: >26700 ppm/1h		Eye (rabbit): 0.87 mg - mild
Oral (rat) LD50: 636 mg/kg		Eye (rabbit): 100 mg/30sec - mild
		Skin (rabbit): 20 mg/24h - moderate
		Skin (rabbit): 500 mg - moderate
	Not Available	Not Available

BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER	*Hexion MSDS Epikote 1001
XYLENE	Reproductive effector in rats
N-BUTANOL	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
TOLUENE	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).
Carbozinc 859EZ2 Part A, BISPHENOL A/ BISPHENOL A DIGLYCIDYL ETHER POLYMER	The following information refers to contact allergens as a group and may not be specific to this product.
N-BUTYL ACETATE, XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation.

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

CMR STATUS

SKIN	n-butanol	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption
	toluene	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

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

Persistence and degradability

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

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available



SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

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

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	
HAZCHEM	*3YE; *3Y

Land transport (UN)

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

Air transport (ICAO-IATA / DGR)

UN number	1263
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	n-butanol	Not Available	Not Available	Not Available

SECTION 15 REGULATORY INFORMATION

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

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

HSR Number	Group Standard
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2006
bisphenol A/ bisphenol A diglycidyl ether polymer(25036-25-3) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","Sigma-AldrichTransport Information"
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 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"
dipropylene glycol dibenzoate(27138-31-4) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD List of High Production Volume (HPV) Chemicals","GESAMP/EHS Composite List - GESAMP Hazard Profiles","Sigma-AldrichTransport Information","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"
xylene(1330-20-7) is found on the following regulatory lists	"International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","New Zealand Inventory of Chemicals (NZIoC)","International Council of Chemical Associations (ICCA) - High Production Volume List","International Fragrance Association (IFRA) Survey: Transparency List","FisherTransport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification 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)"
n-butanol(71-36-3) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods","OECD List of High Production Volume (HPV) Chemicals","International Council of Chemical Associations (ICCA) - High Production Volume List","International Fragrance Association (IFRA) Survey: Transparency List","IOFI Global Reference List of Chemically Defined Substances","IMO IBC Code Chapter 18: List of products to which the Code does not apply","GESAMP/EHS Composite List - GESAMP Hazard Profiles","FisherTransport Information","Sigma-AldrichTransport Information","Acros Transport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single 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","IMO IBC Code Chapter 17: Summary of minimum requirements","OSPAR National List of Candidates for Substitution – Norway"
toluene(108-88-3) is found on the following regulatory lists	"International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs","New Zealand Inventory of Chemicals (NZIoC)","IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","IMO IBC Code Chapter 17: Summary of minimum requirements","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","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods","OECD List of High Production Volume (HPV) Chemicals","New Zealand Cosmetic Products Group Standard - Schedule 5 - Table 1: Components Cosmetic Products Must Not Contain Except Subject to the Restrictions and Conditions Laid Down","International Fragrance Association (IFRA) Standards Prohibited","WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water","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","OSPAR List of Chemicals for Priority Action","GESAMP/EHS Composite List - GESAMP Hazard Profiles","United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II","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"

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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Carbozinc 859EZ2 Part B

ALTEX COATINGS LTD

Chemwatch: 9-43620

Version No: 2.6

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 3

Issue Date: 27/12/2013

Print Date: 10/01/2014

S.GHS.NZLEN

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

Product Identifier

Product name	Carbozinc 859EZ2 Part B
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

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

Relevant identified uses	Use according to manufacturer's directions. Part B of a two pack epoxy zinc coating
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Details of the supplier of the safety data sheet

Registered company name	ALTEX COATINGS LTD
Address	91-111 Oropi Road 3112 Bay of Plenty New Zealand
Telephone	+64 7 5411974
Fax	+64 7 5411310
Website	Not Available
Email	neil.debenham@carboline.co.nz

Emergency telephone number

Association / Organisation	NZ Poisons Centre (0800-1630hr Mon-Fri)
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 ^[1]	Flammable Liquid Category 3, Metal Corrosion Category 1, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 2, Skin Corrosion/Irritation Category 1B, Serious Eye Damage Category 1, Reproductive Toxicity Category 2, STOT - SE (Narcosis) Category 3, STOT - RE Category 2, Aspiration Hazard Category 1, Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	3.1C, 6.1B (inhalation), 6.1D (dermal), 6.1D (oral), 6.1E (aspiration), 6.8B, 6.9 (narcotic), 6.9B, 8.1A, 8.2B, 8.3A, 9.1B, 9.1D

Label elements

GHS label elements	
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SIGNAL WORD

DANGER**Hazard statement(s)**

H226	Flammable liquid and vapour
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H330	Fatal if inhaled
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H304	May be fatal if swallowed and enters airways
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Supplementary statement(s)

Not Applicable

Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P234	Keep only in original container.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P284	[In case of inadequate ventilation] wear respiratory 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

P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.
P301+P330+P331	IF SWALLOWED: Rinse mouth.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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
P320	Specific treatment is urgent (see advice on this label).
P370+P378	In case of fire: Use... to extinguish.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
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
P362+P364	Take off contaminated clothing and wash it before reuse.

Precautionary statement(s): Storage

P403+P233	Store in a well-ventilated place.
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
64742-95-6.	30-40	aromatic hydrocarbon solvent
108-88-3	10-20	toluene
90-72-2	1-10	Ancamine K54 (2,4,6-tris(dimethylamino)methyl]phenol)
100-51-6	1-10	benzyl alcohol
135108-88-2	1-10	formaldehyde/ benzenamine, hydrogenated
140-31-8	1-10	N-aminoethylpiperazine
1761-71-3	1-10	4,4'-methylenebis(cyclohexylamine)

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Immediately hold eyelids apart and flush the eye continuously with running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately flush body and clothes with large amounts of water, using safety shower if available. ▶ Quickly remove all contaminated clothing, including footwear. ▶ Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. ▶ Transport to hospital, or doctor.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay.
Ingestion	<ul style="list-style-type: none"> ▶ For advice, contact a Poisons Information Centre or a doctor at once. ▶ Urgent hospital treatment is likely to be needed. ▶ If swallowed do NOT induce vomiting. ▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. ▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. ▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▶ Transport to hospital or doctor without delay. ▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. ▶ Avoid giving milk or oils. ▶ Avoid giving alcohol.

Indication of any immediate medical attention and special treatment needed

	<p>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.</p> <p>For acute or short term repeated exposures to xylene:</p> <ul style="list-style-type: none"> ▶ Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal. ▶ Pulmonary absorption is rapid with about 60-65% retained at rest. ▶ Primary threat to life from ingestion and/or inhalation, is respiratory failure. ▶ Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ < 50 mm Hg or pCO₂ > 50 mm Hg) should be intubated. ▶ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance. ▶ A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax. ▶ Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice. <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>
--	--

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	

for poisons (where specific treatment regime is absent):

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 L/min.
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock.
- Anticipate seizures .
- **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
 - Positive-pressure ventilation using a bag-valve mask might be of use.
 - Monitor and treat, where necessary, for arrhythmias.
 - Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
 - Drug therapy should be considered for pulmonary oedema.
 - Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
 - Treat seizures with diazepam.
 - Proparacaine hydrochloride should be used to assist eye irrigation.
- BRONSTEIN, A.C. and CURRANCE, P.L.*
EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility

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

Advice for firefighters

Fire Fighting

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

Fire/Explosion Hazard

Combustion products include:

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- Remove all ignition sources.

Major Spills

- Clear area of personnel and move upwind.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

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

Other information

- Store in original containers in approved flame-proof area.

Conditions for safe storage, including any incompatibilities

Suitable container

- Packing as supplied by manufacturer.

Storage incompatibility

Xylenes:



X 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)	toluene	Toluene	188 (mg/m ³) / 50 (ppm)	Not Available	Not Available	Skin absorption

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
aromatic hydrocarbon solvent	500(ppm)	750(ppm)	750(ppm)	750(ppm)
toluene	200(ppm)	200(ppm)	510(ppm)	2900(ppm)
Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol)	5(ppm)	15(ppm)	100(ppm)	500(ppm)
benzyl alcohol	10(ppm)	60(ppm)	150(ppm)	150(ppm)
N-aminoethylpiperazine	2.5(ppm)	7.5(ppm)	50(ppm)	500(ppm)

Ingredient	Original IDLH	Revised IDLH
toluene	2,000(ppm)	500(ppm)

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	▸ Chemical goggles.
Skin protection	See Hand protection below
Hand protection	▸ Wear chemical protective gloves, e.g. PVC.
Body protection	See Other protection below
Other protection	▸ Overalls.
Thermal hazards	

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
 Carbozinc 859EZ2 Part B Not Available

Material	CPI

* CPI - Chemwatch Performance Index

Respiratory protection

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

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

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AK-AUS / Class 1 P2	-	AK-PAPR-AUS / Class 1 P2
up to 50 x ES	Air-line*	-	-
up to 100 x ES	-	AK-3 P2	-
100+ x ES	-	Air-line**	-

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

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Coloured with Characteristic Odour		
Physical state	Liquid	Relative density (Water = 1)	0.93
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	487
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)	135	Molecular weight (g/mol)	Not Available
Flash point (°C)	28	Taste	Not Available
Evaporation rate	1.3	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.0	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	0.8	Volatile Component (%vol)	56
Vapour pressure (kPa)	1.9	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.7	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

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

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption.
Eye	The material can produce chemical burns to the eye following direct contact.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw.

Carbozinc 859EZ2 Part B	TOXICITY	IRRITATION
	Not Available	Not Available
aromatic hydrocarbon solvent	TOXICITY	IRRITATION
	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
		Skin (rabbit):20 mg/24h-moderate
		Skin (rabbit):500 mg - moderate
	Not Available	Not Available
Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol)	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 1280 mg/kg	[Ciba]
	Inhalation (rat) LC50: >0.5 mg/l/1 hr.	[Rohm & Haas, Henkel]*
	Oral (rat) LD50: 1200 mg/kg	Eye (rabbit): 0.05 mg/24h - SEVERE
	Oral (rat) LD50: 2500 mg/kg *	Skin (rabbit): 2 mg/24h - SEVERE

	Not Available	Not Available
benzyl alcohol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 2000 mg/kg	Eye (rabbit): 0.75 mg open SEVERE
	Inhalation (rat) LC50: >4178 mg/m3/4h	Skin (man): 16 mg/48h-mild
	Inhalation (rat) LC50: 1000 ppm/8h	Skin (rabbit): 10 mg/24h open-mild
	Oral (rat) LD50: 1230 mg/kg	
	Not Available	Not Available
formaldehyde/ benzenamine, hydrogenated	TOXICITY	IRRITATION
	Not Available	Not Available
N-aminoethylpiperazine	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 880 mg/kg	Eye (rabbit): 20 mg/24h - mod
	Intraperitoneal (Mouse) LD50: 250 mg/kg	Skin (rabbit): 0.1 mg/24h - mild
	Oral (rat) LD50: 2410 mg/kg	Skin (rabbit): 5 mg/24h - SEVERE
	Not Available	Not Available
4,4'-methylenebis(cyclohexylamine)	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 2110 mg/kg *	* [Air Products and Chemicals]
	Inhalation (mouse) LD50: 400 mg/m3/4h	** [BASF CCINFO 1882394]
	Oral (rat) LD50: 380 mg/kg *	Eye (rabbit): 10uL/24h SEVERE
	Oral (rat) LD50: 670 mg/kg	Skin (rabbit): SEVERE Corrosive **
	Not Available	Not Available

Carbozinc 859E22 Part B	No significant acute toxicological data identified in literature search.
ANCAMINE K54 (2,4,6-TRIS[(DIMETHYLAMINO)METHYL]PHENOL)	While it is difficult to generalise about the full range of potential health effects posed by exposure to the many different amine compounds, characterised by those used in the manufacture of polyurethane and polyisocyanurate foams, it is agreed that overexposure to the majority of these materials may cause adverse health effects.
AROMATIC HYDROCARBON SOLVENT, FORMALDEHYDE/ BENZENAMINE, HYDROGENATED	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
TOLUENE, BENZYL ALCOHOL	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).
N-AMINOETHYLPIPERAZINE, 4,4'-METHYLENEBIS(CYCLOHEXYLAMINE)	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	Acute Toxicity (Oral) Category 4 Acute Toxicity (Dermal) Category 4 Acute Toxicity (Inhalation) Category 2	Carcinogenicity	Not Applicable
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 1B	Reproductivity	Reproductive Toxicity Category 2
Serious Eye Damage/Irritation	Serious Eye Damage Category 1	STOT - Single Exposure	STOT - SE (Narcosis) Category 3
Respiratory or Skin sensitisation	Not Applicable	STOT - Repeated Exposure	STOT - RE Category 2
Mutagenicity	Not Applicable	Aspiration Hazard	Aspiration Hazard Category 1

CMR STATUS

SKIN	toluene	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption
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SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic organisms.

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	
HAZCHEM	*3WE*; *3W*

Land transport (UN)

UN number	3469
Packing group	III
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)
Environmental hazard	No relevant data
Transport hazard class(es)	Class 3 Subrisk 8
Special precautions for user	Special provisions 163;223;367 limited quantity 5 L

Air transport (ICAO-IATA / DGR)

UN number	3469
Packing group	III
UN proper shipping name	Paint, flammable, corrosive (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base); Paint related material, flammable, corrosive (including paint thinning or reducing compound)
Environmental hazard	No relevant data
Transport hazard class(es)	ICAO/IATA Class 3 ICAO / IATA Subrisk 8 ERG Code 3C
Special precautions for user	Special provisions A3A72 Cargo Only Packing Instructions 365 Cargo Only Maximum Qty / Pack 60 L Passenger and Cargo Packing Instructions 354 Passenger and Cargo Maximum Qty / Pack 5 L Passenger and Cargo Limited Quantity Packing Instructions Y342 Passenger and Cargo Maximum Qty / Pack 1 L

Sea transport (IMDG-Code / GGVSee)

UN number	3469
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Packing group	III
UN proper shipping name	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)
Environmental hazard	No relevant data
Transport hazard class(es)	IMDG Class : 3 IMDG Subrisk : 8
Special precautions for user	EMS Number : F-E,S-C Special provisions : 163 223 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
HSR002623	N.O.S.

aromatic hydrocarbon solvent(64742-95-6.) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Chemical Secretariat (ChemSec) SIN List ("Substitute It Now!)", "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"
toluene(108-88-3) is found on the following regulatory lists	"International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "New Zealand Inventory of Chemicals (NZIoC)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO IBC Code Chapter 17: Summary of minimum requirements", "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", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "OECD List of High Production Volume (HPV) Chemicals", "New Zealand Cosmetic Products Group Standard - Schedule 5 - Table 1: Components Cosmetic Products Must Not Contain Except Subject to the Restrictions and Conditions Laid Down", "International Fragrance Association (IFRA) Standards Prohibited", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "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", "OSPAR List of Chemicals for Priority Action", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II", "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"
Ancamine K54 (2,4,6-tris[(dimethylamino)methyl]phenol) (90-72-2) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "OECD List of High Production Volume (HPV) Chemicals", "International Council of Chemical Associations (ICCA) - High Production Volume List", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New 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"
benzyl alcohol(100-51-6) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO IBC Code Chapter 17: Summary of minimum requirements", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "OECD List of High Production Volume (HPV) Chemicals", "International Numbering System for Food Additives", "International Fragrance Association IFRA Standards Annex I", "New Zealand Cosmetic Products Group Standard - Schedule 7: Preservatives Cosmetic Products May Contain With Restrictions - Table 1: List of Preservatives Allowed", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "New Zealand Cosmetic Products Group Standard - Schedule 5 - Table 1: Components Cosmetic Products Must Not Contain Except Subject to the Restrictions and Conditions Laid Down", "IOFI Global Reference List of Chemically Defined Substances", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "International Fragrance Association (IFRA) Standards Restricted", "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 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)", "New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "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"
formaldehyde/ benzenamine, hydrogenated(135108-88-2) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "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"
N-aminoethylpiperazine(140-31-8) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO IBC Code Chapter 17: Summary of minimum requirements", "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", "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", "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", "New Zealand Cosmetic Products Group Standard - Schedule 5 - Table 1: Components Cosmetic Products Must Not Contain Except Subject to the Restrictions and Conditions Laid Down", "OSPAR National List of Candidates for Substitution – United Kingdom"
<p>4,4'-methylenebis(cyclohexylamine) (1761-71-3) is found on the following regulatory lists</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", "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", "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"</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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