

# Carbothane 134HG Part A

Altex Coatings Ltd

Chemwatch: 9-47447  
Version No: 2.5  
Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 4

Issue Date: 07/02/2014  
Print Date: 07/02/2014  
Initial Date: 07/02/2014  
S.GHS.NZLEN

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

### Product Identifier

Product name	Carbothane 134HG 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 polyurethane
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### Details of the supplier of the safety data sheet

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

### Emergency telephone number

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

### CHEMWATCH EMERGENCY RESPONSE

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

Once connected and if the message is not in your preferred language then please dial 01



## SECTION 2 HAZARDS IDENTIFICATION

### Classification of the substance or mixture

**Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation.**

GHS Classification <sup>[1]</sup>	Flammable Liquid Category 2, Acute Toxicity (Oral) Category 5, 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 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	3.1B, 6.1E (oral), 6.3A, 6.4A, 6.5B (contact), 6.8B, 6.9B (dermal), 9.1C

### Label elements

GHS label elements	 
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SIGNAL WORD	DANGER
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## Carbothane 134HG Part A

## Hazard statement(s)

H225	Highly flammable liquid and vapour
H303	May be harmful if swallowed
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
H412	Harmful to aquatic life with long lasting effects

## 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.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.

## Precautionary statement(s): Storage

P403+P235	Store in a well-ventilated place.
P405	Store locked up.

## Precautionary statement(s): Disposal

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

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
123-86-4	1-10	<a href="#">n-butyl acetate</a>
108-88-3	1-10	<a href="#">toluene</a>
104810-48-2	<=1	<a href="#">Tinuvin 1130</a>
41556-26-7	<=1	<a href="#">bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate</a>

## SECTION 4 FIRST AID MEASURES

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

## Description of first aid measures

Eye Contact	If this product comes in contact with eyes: <ul style="list-style-type: none"><li>► Wash out immediately with water.</li><li>► If irritation continues, seek medical attention.</li></ul>
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Continued...

## Carbothane 134HG Part A

	<ul style="list-style-type: none"> <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

Treat symptomatically.

For acute or short term repeated exposures to xylene:

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

BIOLOGICAL EXPOSURE INDEX - BEI

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

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

## SECTION 5 FIREFIGHTING MEASURES

## Extinguishing media

	<ul style="list-style-type: none"> <li>Foam.</li> </ul>
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## Special hazards arising from the substrate or mixture

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

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>Liquid and vapour are highly flammable.</li> </ul>

## SECTION 6 ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>Remove all ignition sources.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>Clear area of personnel and move upwind.</li> </ul>
	<p>Personal Protective Equipment advice is contained in Section 8 of the MSDS.</p>

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>Containers, even those that have been emptied, may contain explosive vapours.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>Store in original containers in approved flame-proof area.</li> </ul>

## Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>Packing as supplied by manufacturer.</li> </ul>
<b>Storage incompatibility</b>	n-Butyl acetate:

## PACKAGE MATERIAL INCOMPATIBILITIES

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## Carbothane 134HG Part A

## Control parameters

## OCCUPATIONAL EXPOSURE LIMITS (OEL)

## INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	n-butyl acetate	n-Butyl acetate	713 (mg/m3) / 150 (ppm)	950 (mg/m3) / 200 (ppm)	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene	188 (mg/m3) / 50 (ppm)	Not Available	Not Available	Skin absorption

## EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
n-butyl acetate	5(ppm)	5(ppm)	200(ppm)	3000(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)
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	► 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)

## GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:  
Carbothane 134HG Part A Not Available

Material	CPI
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\* CPI - Chemwatch Performance Index

## Respiratory protection

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

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

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

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

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(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
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## Carbothane 134HG Part A

Physical state	Liquid	Relative density (Water = 1)	1.2 - 1.4
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	458
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)	125	Molecular weight (g/mol)	Not Available
Flash point (°C)	19	Taste	Not Available
Evaporation rate	1.2	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.5	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.5	Volatile Component (%vol)	20
Vapour pressure (kPa)	1.47	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.8	VOC g/L	Not Available

## SECTION 10 STABILITY AND REACTIVITY

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

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).
Ingestion	The material has
Skin Contact	The material produces mild skin irritation; evidence exists, or practical experience predicts, that the material either
Eye	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).
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.

Carbothane 134HG Part A	TOXICITY	IRRITATION
	Not Available	Not Available
n-butyl acetate	TOXICITY	IRRITATION
	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
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

## Carbothane 134HG Part A

Tinuvin 1130	TOXICITY	IRRITATION
	Not Available	Not Available
bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate	TOXICITY	IRRITATION
	Oral (rat) LD50: 3100 mg/kg *	*[Ameron]
	Not Available	Not Available

N-BUTYL ACETATE	The material may produce severe irritation to the eye causing pronounced inflammation.
TOLUENE	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic).
Carbothane 134HG Part A, TINUVIN 1130, BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)SEBACATE	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	Acute Toxicity (Oral) Category 5	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	toluene	New Zealand Workplace Exposure Standards (WES) - Skin	Skin absorption
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## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

For toluene:

## Persistence and degradability

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

## Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

## Mobility in soil

Ingredient	Mobility
Not Available	Not Available


## SECTION 13 DISPOSAL CONSIDERATIONS

## Waste treatment methods

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

## SECTION 14 TRANSPORT INFORMATION

## Labels Required

	
Marine Pollutant	NO
HAZCHEM	*3YE; *3Y

## Land transport (UN)

## Carbothane 134HG Part A

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

## Air transport (ICAO-IATA / DGR)

UN number	1263
Packing group	II
UN proper shipping name	Paint related material (including paint thinning or reducing compounds); Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
Environmental hazard	No relevant data
Transport hazard class(es)	ICAO/IATA Class : 3 ICAO / IATA Subrisk : ERG Code : 3L
Special precautions for user	Special provisions : A3A72 Cargo Only Packing Instructions : 364 Cargo Only Maximum Qty / Pack : 60 L Passenger and Cargo Packing Instructions : 353 Passenger and Cargo Maximum Qty / Pack : 5 L Passenger and Cargo Limited Quantity Packing Instructions : Y341 Passenger and Cargo Maximum Qty / Pack : 1 L

## Sea transport (IMDG-Code / GGVSee)

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

## SECTION 15 REGULATORY INFORMATION

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

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

HSR Number	Group Standard
HSR002596	Laboratory Chemicals and Reagent Kits Group Standard 2006
HSR002528	Cleaning Products (Flammable) Group Standard 2006
HSR002662	Surface Coatings and Colourants (Flammable) Group Standard 2006
HSR002583	Fuel Additives (Flammable) Group Standard 2006
HSR002641	Polymers (Flammable) Group Standard 2006
HSR002611	Metal Industry Products (Flammable) Group Standard 2006
HSR002621	N.O.S.
HSR002637	Photographic Chemicals (Flammable) Group Standard 2006
HSR002495	Additives, Process Chemicals and Raw Materials (Flammable) Group Standard 2006
HSR002556	Dental Products (Flammable) Group Standard 2006
HSR002576	Food Additives and Fragrance Materials (Flammable) Group Standard 2006

Continued...

## Carbothane 134HG Part A

HSR002563	Embalming Products (Flammable) Group Standard 2006
HSR100425	Pharmaceutical Active Ingredients Group Standard 2010
HSR002599	Leather and Textile Products (Flammable) Group Standard 2006
HSR002603	Lubricants (Flammable) Group Standard 2006
HSR002552	Cosmetic Products Group Standard 2006
HSR002548	Corrosion Inhibitors (Flammable) Group Standard 2006
HSR002650	Solvents (Flammable) Group Standard 2006

<b>n-butyl acetate(123-86-4) 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", "IOFI Global Reference List of Chemically Defined Substances", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "FisherTransport Information", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "OSPAR National List of Candidates for Substitution – Norway", "OECD List of High Production Volume (HPV) Chemicals", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)"
<b>toluene(108-88-3) 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", "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", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "OECD List of High Production Volume (HPV) Chemicals", "International Fragrance Association (IFRA) Standards Prohibited", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods", "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", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "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", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits"
<b>Tinuvin 1130(104810-48-2) is found on the following regulatory lists</b>	"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "New Zealand Inventory of Chemicals (NZIoC)", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits"
<b>bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate(41556-26-7) is found on the following regulatory lists</b>	"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "New Zealand Inventory of Chemicals (NZIoC)", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "OECD List of High Production Volume (HPV) Chemicals", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "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", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits"

## 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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# Carbothane 134HG Part B

ALTEX COATINGS LTD

Chemwatch: 9-47448

Version No: 2.4

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 2

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Initial Date: 07/02/2014

S.GHS.NZLEN

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

### Product Identifier

Product name	Carbothane 134HG Part B
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

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

Relevant identified uses	Use according to manufacturer's directions. Part B of a two pack polyurethane 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 <sup>[1]</sup>	Flammable Liquid Category 3, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 3, Eye Irritation Category 2A, Respiratory Sensitizer Category 1, Skin Sensitizer Category 1, Chronic Aquatic Hazard Category 3
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	3.1C, 6.1D (inhalation), 6.3B, 6.4A, 6.5A (respiratory), 6.5B (contact), 9.1C

### Label elements

GHS label elements	  
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SIGNAL WORD

**DANGER**

Continued...

## Carbothane 134HG Part B

## Hazard statement(s)

H226	Flammable liquid and vapour
H332	Harmful if inhaled
H316	Causes mild skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction
H412	Harmful to aquatic life with long lasting effects

## Precautionary statement(s): Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
P233	Keep container tightly closed.
P261	Avoid breathing 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.
P284	[In case of inadequate ventilation] wear respiratory 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

P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P321	Specific treatment (see advice on this label).
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician/first aider
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.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing.

## Precautionary statement(s): Storage

P403+P235	Store in a well-ventilated place.
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## Precautionary statement(s): Disposal

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

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
28182-81-2	90-100	<a href="#">hexamethylene diisocyanate polymer</a>
64742-95-6.	1-10	<a href="#">C9-aromatic hydrocarbon solvent</a>
123-86-4	1-10	<a href="#">n-butyl acetate</a>

## 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 eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with water.</li> <li>▶ If irritation continues, seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
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## Carbothane 134HG Part B

<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 or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul> <p>Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted.</p>
<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>For sub-chronic and chronic exposures to isocyanates:</p> <ul style="list-style-type: none"> <li>This material may be a potent pulmonary sensitiser which causes bronchospasm even in patients without prior airway hyperreactivity.</li> <li>Clinical symptoms of exposure involve mucosal irritation of respiratory and gastrointestinal tracts.</li> <li>Conjunctival irritation, skin inflammation (erythema, pain vesiculation) and gastrointestinal disturbances occur soon after exposure.</li> <li>Pulmonary symptoms include cough, burning, substernal pain and dyspnoea.</li> <li>Some cross-sensitivity occurs between different isocyanates.</li> <li>Noncardiogenic pulmonary oedema and bronchospasm are the most serious consequences of exposure. Markedly symptomatic patients should receive oxygen, ventilatory support and an intravenous line.</li> <li>Treatment for asthma includes inhaled sympathomimetics (epinephrine [adrenalin], terbutaline) and steroids.</li> <li>Activated charcoal (1 g/kg) and a cathartic (sorbitol, magnesium citrate) may be useful for ingestion.</li> <li>Mydriatics, systemic analgesics and topical antibiotics (Sulamyd) may be used for corneal abrasions.</li> <li>There is no effective therapy for sensitised workers.</li> </ul> <p>[Ellenhorn and Barceloux; Medical Toxicology]</p> <p><b>NOTE:</b> Isocyanates cause airway restriction in naive individuals with the degree of response dependant on the concentration and duration of exposure. They induce smooth muscle contraction which leads to bronchoconstrictive episodes. Acute changes in lung function, such as decreased FEV1, may not represent sensitivity.</p> <p>[Karol &amp; Jin, Frontiers in Molecular Toxicology, pp 56-61, 1992]</p> <p>Personnel who work with isocyanates, isocyanate prepolymers or polyisocyanates should have a pre-placement medical examination and periodic examinations thereafter, including a pulmonary function test. Anyone with a medical history of chronic respiratory disease, asthmatic or bronchial attacks, indications of allergic responses, recurrent eczema or sensitisation conditions of the skin should not handle or work with isocyanates. Anyone who develops chronic respiratory distress when working with isocyanates should be removed from exposure and examined by a physician. Further exposure must be avoided if a sensitivity to isocyanates or polyisocyanates has developed.</p>
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## SECTION 5 FIREFIGHTING MEASURES

## Extinguishing media

	<ul style="list-style-type: none"> <li>Small quantities of water in contact with hot liquid may react violently with generation of a large volume of rapidly expanding hot sticky semi-solid foam.</li> </ul>
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## Special hazards arising from the substrate or mixture

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

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>Liquid and vapour are flammable.</li> </ul>

## SECTION 6 ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>Remove all ignition sources.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>Liquid Isocyanates and high isocyanate vapour concentrations will penetrate seals on self contained breathing apparatus - SCBA should be used inside encapsulating suit where this exposure may occur.</li> </ul>

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

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>Containers, even those that have been emptied, may contain explosive vapours.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>Store in original containers in approved flammable liquid storage area.</li> </ul>

## Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>Packing as supplied by manufacturer.</li> </ul>
<b>Storage incompatibility</b>	<ul style="list-style-type: none"> <li>Avoid cross contamination between the two liquid parts of product (kit).</li> </ul>

## Carbothane 134HG Part B

## 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)	hexamethylene diisocyanate polymer	Isocyanates, all, (as -NCO)	0.02 (mg/m3)	0.07 (mg/m3)	Not Available	Sensitiser; These values apply to all isocyanates, including prepolymers, present in the workplace air as vapours, mist or dust.
New Zealand Workplace Exposure Standards (WES)	n-butyl acetate	n-Butyl acetate	713 (mg/m3) / 150 (ppm)	950 (mg/m3) / 200 (ppm)	Not Available	Not Available

## EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
hexamethylene diisocyanate polymer	7.5(ppm)	25(ppm)	200(ppm)	500(ppm)
C9-aromatic hydrocarbon solvent	500(ppm)	750(ppm)	750(ppm)	750(ppm)
n-butyl acetate	5(ppm)	5(ppm)	200(ppm)	3000(ppm)

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

## Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
Personal protection	
Eye and face protection	► Safety glasses with side shields.
Skin protection	See Hand protection below
Hand protection	<b>NOTE:</b>
Body protection	See Other protection below
Other protection	All employees working with isocyanates must be informed of the hazards from exposure to the contaminant and the precautions necessary to prevent damage to their health.
Thermal hazards	

## Recommended material(s)

## GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:  
Carbothane 134HG Part B Not Available

Material	CPI
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\* CPI - Chemwatch Performance Index

## Respiratory protection

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

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

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

## Carbothane 134HG Part B

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

<b>Appearance</b>	Clear Colour with Characteristic Odour		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	1.00
<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>	444
<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>	137	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	32	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	0.9	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Available	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	7.3	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	1.2	<b>Volatile Component (%vol)</b>	10
<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>	4.0	<b>VOC g/L</b>	Not Available

## SECTION 10 STABILITY AND REACTIVITY

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

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

<b>Inhaled</b>	Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.
<b>Ingestion</b>	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models).
<b>Skin Contact</b>	The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis.
<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>	Practical evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a substantial number of individuals at a greater frequency than would be expected from the response of a normal population.

<b>Carbothane 134HG Part B</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>hexamethylene diisocyanate polymer</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: >5000 mg/kg* Inhalation (rat) LC50: 18500 mg/m3/1h Inhalation (Rat) LC50: 390000 mg/m3/4h ** Oral (rat) LD50: >10000 mg/kg* Not Available	<b>IRRITATION</b> Skin (rabbit): 500 mg - moderate    Not Available
<b>C9-aromatic hydrocarbon solvent</b>	<b>TOXICITY</b> Not Available	<b>IRRITATION</b> Not Available
<b>n-butyl acetate</b>	<b>TOXICITY</b> Dermal (rabbit) LD50: 3200 mg/kg* Inhalation (rat) LC50: 2000 ppm/4H Inhalation (Rat) LC50: 390 ppm/4h	<b>IRRITATION</b> * [PPG] Eye ( human): 300 mg 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

HEXAMETHYLENE DIISOCYANATE POLYMER	* Bayer SDS ** Ardex SDS
C9-AROMATIC HYDROCARBON SOLVENT	Asthma-like symptoms may continue for months or even years after exposure to the material ceases.
N-BUTYL ACETATE	The material may produce severe irritation to the eye causing pronounced inflammation.
Carbothane 134HG Part B, HEXAMETHYLENE DIISOCYANATE POLYMER	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	Acute Toxicity (Inhalation) Category 4	Carcinogenicity	Not Applicable
Skin Irritation/Corrosion	Skin Corrosion/Irritation Category 3	Reproductivity	Not Applicable
Serious Eye Damage/Irritation	Eye Irritation Category 2A	STOT - Single Exposure	Not Applicable
Respiratory or Skin sensitisation	Respiratory Sensitizer Category 1 Skin Sensitizer Category 1	STOT - Repeated Exposure	Not Applicable
Mutagenicity	Not Applicable	Aspiration Hazard	Not Applicable

CMR STATUS

SECTION 12 ECOLOGICAL INFORMATION

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

Persistence and degradability

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

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

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

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	*3YE; *3Y

## Carbothane 134HG Part B

## 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

## 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

hexamethylene diisocyanate polymer(28182-81-2) is found on the following regulatory lists	"IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk","International Council of Chemical Associations (ICCA) - High Production Volume List","New Zealand Inventory of Chemicals (NZIoC)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Scheduled Toxic Substances","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","OECD List of High Production Volume (HPV) Chemicals","New Zealand Workplace Exposure Standards (WES)","Sigma-AldrichTransport Information","GESAMP/EHS Composite List - GESAMP Hazard Profiles","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","IMO IBC Code Chapter 17: Summary of minimum requirements","Acros Transport Information","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)"
C9-aromatic hydrocarbon solvent(64742-95-6.) is found on the following regulatory lists	"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)","New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities","New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods","United Nations

Continued...

## Carbothane 134HG Part B

	Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "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", "New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits"
n-butyl acetate(123-86-4) is found on the following regulatory lists	"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", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "New Zealand Inventory of Chemicals (NZIoC)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "FisherTransport Information", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 4 Quantity Limits for Dangerous Goods in Excepted Quantities", "OSPAR National List of Candidates for Substitution – Norway", "OECD List of High Production Volume (HPV) Chemicals", "New Zealand Workplace Exposure Standards (WES)", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 3 Segregation requirements for dangerous goods", "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", "New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "IMO IBC Code Chapter 17: Summary of minimum requirements", "Acros Transport Information", "New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)"

## 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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