RESENE PAINTS LTD

Chemwatch: 9-61851 Version No: 2.16 Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 4

Issue Date: 06/06/2014 Print Date: 06/06/2014 Initial Date: Not Available S.GHS.NZL.EN

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

Product Identifier

Product name	RESENE ARMOURCAT 805 PIGMENTED SEALER PALE GREY PART A
Chemical Name	Not Applicable
Synonyms	rev 9269
Proper shipping name	Not Applicable
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.

Details of the supplier of the safety data sheet

Registered company name	RESENE PAINTS LTD	
Address	32 - 50 Vogel Street Naenae Wellington New Zealand	
Telephone	+64 4 5770500	
Fax	+64 4 5770600	
Website	Not Available	
Email	Not Available	

Emergency telephone number

Association / Organisation	Not Available	
Emergency telephone numbers	0800 764766	
Other emergency telephone numbers	0800 737636	

CHEMWATCH EMERGENCY RESPONSE

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

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

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

GHS Classification ^[1]	Flammable Liquid Category 3, Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 5, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Carcinogen Category 2, Reproductive Toxicity Category 2, Aspiration Hazard Category 1, Acute Aquatic Hazard Category 2, Acute Vertebrate 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 (oral), 6.1E (aspiration), 6.1E (dermal), 6.5B (contact), 6.7B, 6.8B, 8.3A, 9.1D, 9.3C	

Label elements

GHS label elements



SIGNAL WORD	DANGER	
Hazard statement(s)		
H226	Flammable liquid and vapour	
H302	Harmful if swallowed	
H313	May be harmful in contact with skin	
H318	Causes serious eye damage	
H317	May cause an allergic skin reaction	
H351	Suspected of causing cancer	
H361	Suspected of damaging fertility or the unborn child	
H304	May be fatal if swallowed and enters airways	
H401	Toxic to aquatic life	
H433	Harmful to terrestrial vertebrates	
Precautionary statement(s): Prevention		
P201	Obtain special instructions before use.	
Precautionary statement(s): Response		
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider	

Precautionary statement(s): Storage P403+P235 Store in a

Store in a well-ventilated place. Keep cool.

Precautionary statement(s): Disposal

Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

P501

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1330-20-7	10-20	xylene
71-36-3	10-20	n-butanol
108-88-3	1-10	toluene
50-00-0	<1	formaldehyde
121888-68-4	<1	bentone SD-2

SECTION 4 FIRST AID MEASURES

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

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	 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.

•	Seek medical advice.	

- Avoid giving milk or oils.
- Avoid giving alcohol.
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Indication of any immediate medical attention and special treatment needed

Mechanical means should be used if it is consider	uce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. red necessary to evacuate the stomach contents; these include gastric lavage after has occurred after ingestion, the patient should be monitored for difficult breathing, as adver
effects of aspiration into the lungs may be delaye To treat poisoning by the higher aliphatic alcoho	d up to 48 hours.
 Gastric lavage with copious amounts of wal It may be beneficial to instill 60 ml of minera 	
 Oxygen and artificial respiration as needed. Electrolyte balance: it may be useful to start toward electrolyte replacement unless shock 	500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitu or severe acidosis threatens
 To protect the liver, maintain carbohydrate in Haemodialysis if coma is deep and persister 	ake by intravenous infusions of glucose. nt. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5)
BASIC TREATMENT	
 Establish a patent airway with suction where Watch for signs of respiratory insufficiency a Administer oxygen by non-rebreather mask a 	necessary. nd assist ventilation as necessary. t 10 to 15 l/min.
 Monitor and treat, where necessary, for short Monitor and treat, where necessary, for puln 	
 Anticipate and treat, where necessary, for so DO NOT use emetics. Where ingestion is s patient is able to swallow, has a strong gag Give activated charcoal. 	spected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where
ADVANCED TREATMENT	
Consider orotracheal or nasotracheal intuba	tion for airway control in unconscious patient or where respiratory arrest has occurred.
 Positive-pressure ventilation using a bag-va Monitor and treat, where necessary, for arrh 	/thmias.
If the patient is hypoglycaemic (decreased of the second secon	nia are present use lactated Ringers solution. Fluid overload might create complications. r loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip
	uires the cautious administration of fluids. Fluid overload might create complications.
 Drug therapy should be considered for pulm Treat seizures with diazepam. Proparacaine hydrochloride should be used 	
EMERGENCY DEPARTMENT	
	; serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum
analyses include anion and osmolar gaps,	phosphorus and magnesium, may assist in establishing a treatment regime. Other useful interial blood gases (ABGs), chest radiographs and electrocardiograph. sisted ventilation may be required for acute parenchymal injury or adult respiratory distress
syndrome. • Acidosis may respond to hyperventilation an	
 Haemodialysis might be considered in patie 	
MATERIALS EXPOSURE: 2nd Ed. 1994	
For C8 alcohols and above. Symptomatic and supportive therapy is advised in	managing patients.
For acute or short term repeated exposures to xy	ene:
 Provide the second state of the s	
 Primary threat to life from ingestion and/or i 	
	v volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be
 Arrhythmias complicate some hydrocarbon 	ngestion and/or inhalation and electrocardiographic evidence of myocardial injury has been tors should be established in obviously symptomatic patients. The lungs excrete inhaled earance.
	fter stabilisation of breathing and circulation to document aspiration and detect the presence
 Epinephrine (adrenalin) is not recommended 	for treatment of bronchospasm because of potential myocardial sensitisation to nchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second
	BIOLOGICAL EXPOSURE INDEX - BEI
These represent the determinants observed in sp	ecimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):
Determinent	

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		
	Alcohol stable foam.	
Special hazards arising from the su	bstrate or mixture	
Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result	
Advice for firefighters		
Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard.	
Fire/Explosion Hazard	Liquid and vapour are flammable.	
SECTION 6 ACCIDENTAL RELEAS	E MEASURES	
Personal precautions, protective eq	uipment 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 STOR	AGE	
Precautions for safe handling		
Safe handling	 Containers, even those that have been emptied, may contain explosive vapours. 	
Other information	 Store in original containers in approved flammable liquid storage area. 	
Conditions for safe storage, including any incompatibilities		
Suitable container	 Packing as supplied by manufacturer. 	
Storage incompatibility	 Toluene: reacts violently with strong oxidisers, bromine, bromine trifluoride, chlorine, hydrochloric acid/ sulfuric acid mixture, 1,3-dichloro- 5,5-dimethyl-2,4-imidazolidindione, dinitrogen tetraoxide, fluorine, concentrated nitric acid, nitrogen dioxide, silver chloride, sulfur dichloride, uranium fluoride, vinyl acetate forms explosive mixtures with strong acids, strong oxidisers, silver perchlorate, tetranitromethane is incompatible with bis-toluenediazo oxide 	

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

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)	xylene	Xylene (o-, m-, p-isomers)	217 mg/m3 / 50 ppm	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	n-butanol	n-Butyl alcohol	Not Available	Not Available	150 mg/m3 / 50 ppm	Skin absorption
New Zealand Workplace Exposure Standards (WES)	toluene	Toluene	188 mg/m3 / 50 ppm	Not Available	Not Available	Skin absorption
New Zealand Workplace Exposure Standards (WES)	formaldehyde	Formaldehyde	0.5 (8 hour shift) 0.33 (12 hour shift) ppm	Not Available	1 ppm	Sensitiser; Confirmed carcinogen; December 2010 change

may generate electrostatic charges, due to low conductivity, on flow or agitation.

attacks some plastics, rubber and coatings

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
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
formaldehyde	0.3 ppm	0.9 ppm	14 ppm	56 ppm
Ingredient	Original IDLH		Revised IDLH	
xylene	1,000 ppm		900 ppm	

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n-butanol	8,000 ppm	1,400 [LEL] ppm
toluene	2,000 ppm	500 ppm
formaldehyde	30 ppm	20 ppm
bentone SD-2	Not Available	Not Available

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		
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. 		
Body protection	See Other protection below		
Other protection	► Overalls.		
Thermal hazards	Not Available		

Recomme

GLOVE SE

Glove selec

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computergenerated selection:

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Material	СРІ
PE/EVAL/PE	А
TEFLON	В
BUTYL	С
HYPALON	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE	С
PVA	С
PVC	С
VITON	С
VITON/CHLOROBUTYL	С

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final

selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise

be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

•		
Hands/feet protection	Wear chemical protective gloves, e.g. PVC.	
Body protection	See Other protection below	
Other protection	► Overalls.	
Thermal hazards	Not Available	
ended material(s)	Respiratory protection	
ELECTION INDEX Where the concentration of gas/particulates in the breathing		
ection is based on a modified presentation of the: approaches or exceeds the "Exposure Standard" (or ES)		

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	BAX-AUS	-	BAX-PAPR-AUS / Class 1
up to 50 x ES	-	BAX-AUS / Class 1	-
up to 100 x ES	-	BAX-2	BAX-PAPR-2 ^

^ - 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)

Appearance	Not Available			
Physical state	Liquid	Relative density (Water = 1)	1.257	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	456	
pH (as supplied)	Not Available	Decomposition temperature	Not Available	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available	

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Initial boiling point and boiling range (°C)	126	Molecular weight (g/mol)	Not Available
Flash point (°C)	24	Taste	Not Available
Evaporation rate	1.0	Explosive properties	Not Available
Flammability	Flammable.	Oxidising properties	Not Available
Upper Explosive Limit (%)	8.7	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.2	Volatile Component (%vol)	33
Vapour pressure (kPa)	0.99	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	3.22	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

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Reactivity	See section 7
Chemical stability	 Unstable in the 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 be harmful.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption.
Eye	When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.
Chronic	On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.

	TOXICITY	IRRITATION
RESENE ARMOURCAT 805 PIGMENTED SEALER PALE GREY PART A		
	Not Available	Not Available
	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 5000 ppm/4h	Eye (human): 200 ppm irritant
	Intraperitoneal (Mouse) LD50: 1548 mg/kg	Eye (rabbit): 5 mg/24h SEVERE
	Intraperitoneal (Rat) LD50: 2459 mg/kg	Eye (rabbit): 87 mg mild
xylene	Oral (Mouse) LD50: 2119 mg/kg	Skin (rabbit):500 mg/24h moderate
	Oral (rat) LD50: 4300 mg/kg	
	Subcutaneous (Rat) LD50: 1700 mg/kg	
	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 3400 mg/kg	Eye (human): 50 ppm - irritant
	Inhalation (rat) LC50: 8000 ppm/4h	Eye (rabbit): 1.6 mg-SEVERE
n-butanol	Oral (rat) LD50: 790 mg/kg	Eye (rabbit): 24 mg/24h-SEVERE
		Skin (rabbit): 405 mg/24h-moderate
	Not Available	Not Available
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12124 mg/kg	Eye (rabbit): 2mg/24h - SEVERE
	Inhalation (rat) LC50: >26700 ppm/1h	Eye (rabbit):0.87 mg - mild
toluene	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
,	TOXICITY	IRRITATION
formaldehyde	Dermal (rabbit) LD50: 270 mg/kg	Eye (human): 4 ppm/5m

Inhalation (rat) LC50: 203 mg/m3	Eye (rabbit): 0.75 mg/24H SEVERE
Oral (rat) LD50: 100 mg/kg	Skin (human): 0.15 mg/3d-l mild
	Skin (rabbit): 2 mg/24H SEVERE
Not Available	Not Available
TOXICITY	IRRITATION
Inhalation (rat) LD50: >12 mg/l 4hr	[Orica]
Oral (rat) LD50: >5000 mg/kg	Eye (rabbit): moderate irritant
	Skin (rabbit): non-irritant
Not Available	Not Available
	Oral (rat) LD50: 100 mg/kg Not Available TOXICITY Inhalation (rat) LD50: >12 mg/l 4hr Oral (rat) LD50: >5000 mg/kg

XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation. 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).
RESENE ARMOURCAT 805 PIGMENTED SEALER PALE GREY PART A, FORMALDEHYDE	The following information refers to contact allergens as a group and may not be specific to this product.

Acute Toxicity	~	Carcinogenicity	×
Skin Irritation/Corrosion	0	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	0
Respiratory or Skin sensitisation	¥	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	*

CMR STATUS

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

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

	FLAMMABLE LIQUID 3
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN)

UN number	1263
Packing group	III
UN proper shipping name	Not Applicable
Environmental hazard	No relevant data
Transport hazard class(es)	Class 3 Subrisk
Special precautions for user	Special provisions Limited quantity

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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
40-7-4-9-0-0-MK-20041022	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
HSR002669	Surface Coatings and Colourants (Flammable, Toxic [6.7]) Group Standard 2006
xylene(1330-20-7) is found on the following regulatory lists	"International Council of Chemical Associations (ICCA) - High Production Volume List", "International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OSPAR List of Chemicals for Priority Action", "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", "FisherTransport Information", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "OECD List of High Production Volume (HPV) Chemicals", "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)", "New Zealand Workplace Exposure Standards (WES)", "OECD Existing Chemicals Database", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking- water", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "UNECE - Kiev Protocol on Pollutant Release and Transfer Registers - Annex III", "International Air Transport Association (IATA) Dangerous Goods (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Dangerous Goods", "International Fragrance Association (IFRA) Survey: Transparency List", "IMO IBC Code Chapter 17: Summary of minimum requirements", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)"
n-butanol(71-36-3) is found on the following regulatory lists	"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)","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 MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "FisherTransport Information","OSPAR National List of Candidates for Substitution – Norway", "OECD List of High Production Volume (HPV) Chemicals", "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)","New Zealand Workplace Exposure Standards (WES)", "OECD Existing Chemicals Database", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "International Air Transport Association (IATA) Dangerous Goods Regulations", "GESAMP/EHS Composite List - GESAMP Hazard Profiles","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of (IFRA) Survey: Transparency List", "Acros Transport Information", "IMO IBC Code Codes", "International Fragrance Association (IFRA) Survey: Transparency List", "Acros Transport Information", "IMO IBC Code Components", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemi
toluene(108-88-3) is found on the following regulatory lists	"International Maritime Dangerous Goods Requirements (IMDG Code)", "United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OSPAR List of Chemicals for Priority Action", "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 Dangerou Goods Model Regulations (English)", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "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", "FisherTransport

	Information", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "International Fragrance Association (IFRA) Standards Prohibited", "OECD List of High Production Volume (HPV) Chemicals", "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)", "New Zealand Workplace Exposure Standards (WES)", "OECD Existing Chemicals Database", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "WHO Guidelines for Drinking-water Quality - Guideline values for chemicals that are of health significance in drinking-water", "Sigma-AldrichTransport Information", "UNECE - Kiev Protocol on Pollutant Release and Transfer Registers - Annex II", "International Air Transport Association (IATA) Dangerous Goods Regulations", "GESAMP/EHS Composite List - GESAMP Profiles", "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", "Across 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", "IMO IBC Code Chapter 17: Summary of minimum requirements"
formaldehyde(50-00-0) is found on the following regulatory lists	"International Council of Chemical Associations (ICCA) - High Production Volume List," "International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index," 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", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments", "FisherTransport Information", "OSPAR National List of Candidates for Substitution – Norvay", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "OECD List of High Production Volume (HPV) Chemicals", "International Numbering System for Food Additives", "International Chemical Secretariat (ChemSec) SIN List ("Substitute It Now!)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rai - Table A: Dangerous Goods List - RID 2013 (Dutch)", "New Zealand Workplace Exposure Standards (WES)", "OECD Existing Chemicals Database", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Sigma-AldrichTransport Information", "WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established", "UNECE - Kiev Protocol on Pollutant Release and Transfer Registers - Annex II", "New Zealand Cosmetic Products Group Standard - Schedule 7: Preservatives Cosmetic Products May Contain With Restrictions - Table 1: List of Preservatives Allowed", "International Air Transport Association (IATA) Dangerous Goods Regulations", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "New Zealand Hazardous
bentone SD-2(121888-68-4) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","OECD Existing Chemicals Database"

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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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