

"From Strength to Strength"

# **Vespol - Polyflash**

Vespol Pty Ltd Chemwatch: 5352-33 Version No: 2.1.1.1 Safety Data Sheet according to WHS and ADG requirements Chemwatch Hazard Alert Code: 2

Issue Date: 22/05/2019 Print Date: 29/05/2019 L.GHS.AUS.EN

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

#### **Product Identifier**

Product name	Vespol - Polyflash
Synonyms	Aluminium & Polythene laminated bitumen dampcourse - Polyflash
Other means of identification	Not Available
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## Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Used as a non-exposed dampcourse material in brick and blockwork walls and also as a concealed flashing around internal window and door frames.

### Details of the supplier of the safety data sheet

Registered company name	Vespol Pty Ltd
Address	26 Garner PI Ingleburn NSW 2565 Australia
Telephone	+61 2 8795 5100
Fax	+61 2 9618 3111
Website	www.vespol.com.au
Email	sales@vespol.com.au

### Emergency telephone number

•••		
Association / Organisation	Kathy Milewicz	
Emergency telephone numbers	+61 2 8795 5100 (Mon-Fri 8am to 4pm)	
Other emergency telephone numbers	Not Available	

## **SECTION 2 HAZARDS IDENTIFICATION**

Hazard pictogram(s)

P261

P271

Classification of the substance or mixture	
Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Skin Sensitizer Category 1, Respiratory Sensitizer Category 1, Carcinogenicity Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects)
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements



Avoid breathing dust/fumes.

Use only outdoors or in a well-ventilated area.

SIGNAL WORD	DANGER
Hazard statement(s)	
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.
H336	May cause drowsiness or dizziness.
Precautionary statement(s) Pr	revention
P201	Obtain special instructions before use.

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P285	In case of inadequate ventilation wear respiratory protection.
P272	Contaminated work clothing should not be allowed out of the workplace.
P272	Contaminated work clothing should not be allowed out of the workplace.

### Precautionary statement(s) Response

resolutionary statement(s) response	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

## Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

#### Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
Not Available		Plastic roll composed of
9002-88-4	>60	polyethylene
Not Available	20-30	aluminium foil as
7429-90-5		aluminium
64742-93-4	10-20	bitumen (blown)

## **SECTION 4 FIRST AID MEASURES**

### Description of first aid measures

If this product comes in contact with the eyes:       > Wash out immediately with fresh running water.         Eye Contact       > Ensure complete imgation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.         Seek medical attention without delay; if pain persists or recurs seek medical attention.       > Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.         If skin contact cours:       > 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.         In case of burns:       > Immediately apply cold water to burn either by immersion or wrapping with saturated clean cloth.         > Do NOT meave or cut away clothing over burnt areas. DO NOT pull away clothing which has adhered to the skin as this can cause further injury.         > Do NOT break biter or remove solidified material.         > Quickly cover wound with dressing or clean cloth to help prevent infection and to ease pain.         > For large burns, sheets, towels or pillow slips are ideal; leave holes for eyes, nose and mouth.         > Do NOT meak biter or remove solidified material.         > Quickly cover wound with dressing or clean cloth to help prevent infection and to ease pain.         > For large burns, sheets, towels or pillow slips are ideal; leave holes for eyes, nose and mouth.         > Do NOT meak biter or remove socid additis in the person is conscious.		
If skin contact occurs: 	Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Inhalation       If fumes, aerosols or combustion products are inhaled remove from contaminated area.         Other measures are usually unnecessary.       Immediately give a glass of water.         First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.	Skin Contact	If skin contact occurs:  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. In case of burns: Immediately apply cold water to burn either by immersion or wrapping with saturated clean cloth. DO NOT remove or cut away clothing over burnt areas. DO NOT pull away clothing which has adhered to the skin as this can cause further injury. DO NOT break blister or remove solidified material. Quickly cover wound with dressing or clean cloth to help prevent infection and to ease pain. For large burns, sheets, towels or pillow slips are ideal; leave holes for eyes, nose and mouth. DO NOT apply ointments, oils, butter, etc. to a burn under any circumstances. Water may be given in small quantities if the person is conscious. Alcohol is not to be given under any circumstances. Reassure. Treat for shock by keeping the person warm and in a lying position. Seek medical aid and advise medical personnel in advance of the cause and extent of the injury and the estimated time of arrival of the patient.
Ingestion         Immediately give a glass of water.           First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.	Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
	Ingestion	<ul> <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.

## SECTION 5 FIREFIGHTING MEASURES

There is no restriction on the type of extinguisher which may be used.

## Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.	
Advice for firefighters		
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> <li>Slight hazard when exposed to heat, flame and oxidisers.</li> </ul>	
Fire/Explosion Hazard	<ul> <li>The material is not readily combustible under normal conditions.</li> <li>However, it will break down under fire conditions and the organic component may burn.</li> <li>Not considered to be a significant fire risk.</li> <li>Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> <li>Other decomposition products include:</li> <li>carbon dioxide (CO2)</li> <li>formaldehyde</li> <li>acrolein</li> <li>sulfur oxides (SOX)</li> <li>sulfur dioxide (SO2)</li> <li>other pyrolysis products typical of burning organic material.</li> </ul>	
HAZCHEM	Not Applicable	

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

## Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Secure load if safe to do so.</li> <li>Bundle/collect recoverable product.</li> <li>Collect remaining material in containers with covers for disposal.</li> </ul>
Major Spills	<ul> <li>Minor hazard.</li> <li>Clear area of personnel.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear physical protective gloves e.g. Leather.</li> <li>Contain spill/secure load if safe to do so.</li> <li>Bundle/collect recoverable product and label for recycling.</li> <li>Collect remaining product and place in appropriate containers for disposal.</li> <li>Clean up/sweep up area.</li> <li>Water may be required.</li> </ul>

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

## SECTION 7 HANDLING AND STORAGE

Precautions for safe handling				
Safe handling	No special handling procedures required.			
Other information	► Keep dry			
Conditions for safe storage, including any incompatibilities				
Suitable container	<ul> <li>Check that containers are clearly labelled</li> <li>Packaging as recommended by manufacturer.</li> </ul>			
Storage incompatibility	Avoid reaction with oxidising agents			

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

## **Control parameters**

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	aluminium	Aluminium (metal dust)	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	aluminium	Aluminium, pyro powders (as Al)	5 mg/m3	Not Available	Not Available	Not Available

Australia Exposure Standards	aluminium	Aluminium (welding fur	nes) (as Al)	5 mg/n	n3	Not Available	No	t Available	Not Available
EMERGENCY LIMITS									
Ingredient	Material name		TEEL-1		TEEL	-2		TEEL-3	
polyethylene	Polyethylene		28 mg/m3		310 m	g/m3		1,000 mg/m3	
Ingredient	Original IDLH				Revised	IDLH			
polyethylene	Not Available				Not Avai	lable			
aluminium	Not Available			Not Available					
bitumen (blown)	Not Available				Not Avai	lable			

### MATERIAL DATA

## Exposure controls

Appropriate engineering controls	Provide adequate ventilation in warehouse or closed storage areas.
Personal protection	
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	Wear general protective gloves, eg. light weight rubber gloves.
Body protection	See Other protection below
Other protection	No special equipment required due to the physical form of the product.

#### **Respiratory protection**

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

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	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - 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	Black plastic roll with no odour; insoluble in water.		
Physical state	Manufactured	Relative density (Water = 1)	0.916-0.939
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	*~>485 (bitumen)
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available

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	Solubility in water	Immiscible		pH as a solution (1%)	Not Available	
	Vapour density (Air = 1)	Not Available		VOC a/L	Not Available	

## SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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	Not normally a hazard due to physical form of product. Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Inhalation hazard is increased at higher temperatures.				
Ingestion	Not normally a hazard due to the physical form of product. The material	is a physical irritant to the gastro-intestinal tract			
Skin Contact	Not normally a hazard due to physical form of product. Molten material is capable of causing burns.				
Eye	Not normally a hazard due to physical form of product. If small fragment enters the eye may cause discomfort and abrasion.				
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. Sensitisation may result in allergic dermatitis responses including rash, itching, hives or swelling of extremities. Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping.				
		1			
Vespol - Polyflash	TOXICITY Nat Available	IRRITATION			
polyethylene	TOXICITY	IRRITATION			
	Dermal (rabbit) LD50: >2000 mg/kg <sup>[2]</sup>	Not Available			
	Inhalation (mouse) LC50: 1.5 mg/l/30m <sup>[2]</sup>				
	Oral (rat) LD50: >3000 mg/kg <sup>[2]</sup>				
	тохісіту	IRRITATION			
aluminium	Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>			
		Skin: no adverse effect observed (not irritating) <sup>[1]</sup>			
	ΤΟΧΙΟΙΤΥ	IRRITATION			
bitumen (blown)	Dermal (rabbit) LD50: >2000 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>			
	Oral (rat) LD50: >5000 mg/kg <sup>[2]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>			
Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - Acute to data extracted from RTECS - Register of Toxic Effect of chemical Subst</li> </ol>	xicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified ances			
POLYETHYLENE	for poly-alpha-olefins (PAOs): PAOs are highly branched isoparaffinic chemicals produced by oligomer mixture is then distilled into appropriate product fractions to meet specifi Read across data exist for health effects endpoints from the following si C12 alpha olefins: • Decene homopolymer • Decene/dodecene copolymer • Dotene/decene/dodecene copolymer • Dotecene trimer The data for these structural analogs demonstrated no evidence of healt carbon atoms are unlikely to be absorbed when administered orally. The occur. If a substance of the size and structure of a typical PAO is absorb	risation of 1-octene, 1-decene, and/or 1-dodecene. The crude polyalphaolefin c viscosity specifications and hydrogenated. milar <i>hydrogenated</i> long chain branched alkanes derived from a C8, C10, and/or h effects. In addition, there is evidence in the literature that alkanes with 30 or more physicochemical data suggest that it is unlikely that significant absorption will ed, then the principal mechanisms of absorption after oral administration are likely			

to be passive diffusion and absorption by way of the lymphatic system. The former requires both good lipid solubility and good water solubility as the

#### substance has to partition from an aqueous environment through a lipophilic membrane into another aqueous environment during absorption. Absorption by way of the lymphatics occurs by mechanisms analogous to those that absorb fatty acids and is limited by the size of the molecule. Lipophilicity generally enhances the ability of chemicals to cross biological membranes. Biotransformation by mixed function oxidases often increases the water solubility of a substance; however, existing data suggest that these substances will not undergo oxidation to more hydrophilic metabolites. Finally, a chemical must have an active functional group that can interact chemically or physically with the target cell or receptor upon reaching it; there are no moieties in PAOs that represent a functional group that may have biological activity. The water solubilities of a C10 dimer PAO and a C12 trimer PAO were determined to be <1 ppb and < 1 ppt respectively. The partition coefficient for a C12 trimer PAO was determined to be log Kow of >7. Given the very low water solubility it is extremely unlikely that PAOs will be absorbed by passive diffusion following oral administration, and the size of the molecules suggest that the extent of lymphatic absorption is likely to be very low. Although PAOs are relatively large lipophilic compounds, and molecular size may be a critical limiting determinant for absorption, there is some evidence that these substances are absorbed. However, the lack of observed toxicity in the studies with PAOs suggests that these products are absorbed poorly, if at all. Furthermore, a review of the literature regarding the absorption and metabolism of long chain alkanes indicates that alkanes with 30+ carbon atoms are unlikely to be absorbed. For example the absorption of squalane, an analogous C30 product, administered orally to male CD rats was examined - essentially all of the squalane was recovered unchanged in the faeces. At the same time, the hydrophobic properties of PAOs suggest that, should they be absorbed, they would undergo limited distribution in the agueous systemic circulation and reach potential target organs in limited concentrations. In addition to the general considerations discussed above, the low volatility of PAOs indicates that, under normal conditions of use or transportation, exposure by the inhalation route is unlikely. In particular, the high viscosity of these substances suggests that it would be difficult to generate a high concentration of respirable particles in the air. Acute toxicity: PAOs (decene/dodecene copolymer, octene/decene/dodecene homo-polymer, and dodecene trimer) have been adequately tested for acute oral toxicity. There were no deaths when the test materials were administered at doses of 5,000 mg/kg (decene/dodecene copolymer and dodecene trimer) and at 2,000 mg/kg (octene/decene/dodecene copolymer) in rats. Overall, the acute oral LD50 for these substances was greater than the 2000 mg/kg limit dose, indicating a relatively low order of toxicity. PAOs (decene/dodecene copolymer, octene/decene/dodecene copolymer, and dodecene trimer) have been tested for acute dermal toxicity. No mortality was observed for any substance when administered at the limit dose of 2000 or 5000 mg/kg. Overall, the acute dermal LD50 for these substances was greater than the 2000 mg/kg limit dose, indicating a relatively low order of toxicity. 1-Decene, homopolymer, is absorbed (unexpectedly for a high molecular weight polymer) to a moderate degree in rat skin and is eliminated slowly PAOs (decene homopolymer, decene/dodecene copolymer, and decene trimer) have been tested for acute inhalation toxicity. Rats were exposed to aerosols of the substances at nominal atmospheric concentrations of 2.5, 5.0, and 5.06 mg/L, respectively, for four hours. These levels were the maximum attainable concentrations under the conditions of the tests, due to the low volatility and high viscosity of the test material. No mortality was noted, and all animals fully recovered following depuration. The lack of mortality at concentrations at or above the limit dose of 2.0 mg/L indicates a relatively low order of toxicity for these substances Repeat dose toxicity: Eight repeated-dose toxicity studies using two different animal species, rats and mice, and oral and dermal routes of administration have been conducted with three structural analogs. These data suggest that the structural analogs exhibit a low order of toxicity following repeated applications, due to their similarity in chemical structures and physicochemical properties. One 28-day oral toxicity study in rats, one 90-day dermal and two 90-day dietary studies in rats, and a dermal carcinogenicity study in mice exist for decene homopolymer. A rat oral combined reproductive toxicity and 91-day systemic toxicity study was also conducted with decene homopolymer. In addition, 28-day rat oral toxicity studies exist for two structurally analogous substances (dodecene trimer and octene/decene/dodecene copolymer); and a 90-day rat dermal toxicity study exists for octene/decene/dodecene copolymer. Results from these studies show a low order of repeated dose toxicity. The dermal NOAEL for systemic toxicity studies was equal to or greater than 2000 mg/kg/day. The oral NOAEL for 1-decene homopolymer is between 5,000 and 20,000 mg/kg/day in Sprague-Dawley rats. Rats exposed repeatedly by dermal exposure at doses of 2000 mg/kg decene/dodecene copolymer showed increased incidences of hyperplasia of the sebaceous glands, hyperplasia/hyperkeratosis of the epidermis and dermal inflammation. These symptoms generally subsided within 2 weeks. Males showed decreased body weight gain and altered serum chemistry. In a 90-day feeding study rats receiving 20000 ppm of 1-decene, homopolymer, hydrogenated did not exhibit any clinical signs of systemic toxicity. Marginal effects on clinical chemistry (glucose and ALT in males; sodium, phosphorus and calcium in females) were seen. Reproductive toxicity: Data are available for decene homopolymer. Results from these studies show a low order of reproductive/ developmental toxicity. The NOAEL for reproductive toxicity was 1000 mg/kg/day, the highest concentration tested. The lack of effects on fertility in this study or effects on reproductive organs in this or other subchronic studies with closely related chemicals indicates that PAOs are unlikely to exert effects on reproduction. Developmental toxicity: Decene homopolymer (with 10 ppm of an antioxidant) was administered once daily on gestation days 0-19 via dermal application to presumed-pregnant rats at doses of 0, 800, and 2000 mg/kg/day. Dermal administration of the test material did not adversely affect parameters of reproductive performance during gestation, nor did it adversely affect in utero survival and development of the offspring. The NOAEL in this study for developmental parameters was 2000 mg/kg/day. Genotoxicity: Information for the following PAOs (decene homopolymer, octene/decene/dodecene copolymer, dodecene trimer; and decene/dodecene copolymer [prepared from 10% C12 and 90% C10 alpha olefins; approx. 33% trimer and 51% tetramer, 16% pentamer and higher]) is available. Either bacterial or mammalian gene mutation assays, in vitro chromosomal aberration assays, or in vivo chromosomal aberration assays have been conducted for these substances. Neither mutagenicity nor clastogenicity were exhibited by any of these substances in the referenced in vivo or in vitro tests, with or without metabolic activation Carcinogenicity: While alpha-olefin polymers have similar properties to mineral oils, they do not contain polycyclic aromatic hydrocarbons, or other known possible carcinogens. Decene homopolymer produced no treatment-related tumors in C3H mice treated with a 50 ul/application twice weekly for 104 weeks. In addition, survival (56%) was greater than in any other group, including the untreated control. Inclusion of polyethylene in the diet of rats at 8 a/ka/day did not result in treatment-related effects. Polyethylene implanted into rats and mice has reportedly caused local tumorigenic activity at doses of 33 to 2120 mg/kg, but the relevance to human exposure is not certain. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. polyethylene pyrolyzate **BITUMEN (BLOWN)** WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans. as extracts of steam-refined and air-refined bitumens: ALUMINIUM & BITUMEN No significant acute toxicological data identified in literature search. (BLOWN) Acute Toxicity Carcinogenicity 0 × Skin Irritation/Corrosion X × Reproductivity Serious Eye Damage/Irritation × STOT - Single Exposure -Respiratory or Skin ~ STOT - Repeated Exposure × sensitisation Mutagenicity X Aspiration Hazard ×

👩 – שמנם פונו ופרדוטר מעמומטופ טרעטפט דוטר זוורעדפ טונפוזמ זטר טמטטווטמנטרד

✔ – Data available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

Legena:

## Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURCE
Vespol - Polyflash	Not Available	Not Available	Not Available		Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURCE
polyethylene	LC50	96	Fish		16.252mg/L	3
	EC50	96	Algae or other aquatic plants	- - - -	61.666mg/L	3
	ENDPOINT	TEST DURATION (HR)	SPECIES	VAI	LUE	SOURCE
	LC50	96	Fish		01-0.134mg/L	2
	EC50	48	Crustacea		364mg/L	2
aiuminium	EC50	72	Algae or other aquatic plants	0.00	01-0.799mg/L	2
	BCF	360	Algae or other aquatic plants	9m	g/L	4
	NOEC	168	Crustacea 0.0		01-mg/L	2
	ENDPOINT	TEST DURATION (HR)	SPECIES		VALUE	SOURCE
bitumen (blown)	LC50	96	Fish		>1-mg/L	2
	EC50	72	Algae or other aquatic plants		>1-mg/L	2
Logand	Extracted from 1	IIICLID Toxicity Data 2 Europe ECHA	Registered Substances - Ecotoxicological Information	n - Aquatic To	xicity 3 EPIWII	l Suite V3 12

d: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

#### DO NOT discharge into sewer or waterways.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
polyethylene	LOW	LOW

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation
polyethylene	LOW (LogKOW = 1.2658)
Mobility in soil	
Ingredient	Mobility

### SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods		
Product / Packaging disposal	<ul> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Bury residue in an authorised landfill.</li> <li>Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul>	

## **SECTION 14 TRANSPORT INFORMATION**

#### Labels Required

polyethylene

Marine Pollutant	NO Not Applicable
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

LOW (KOC = 14.3)

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 and the IBC code

Not Applicable

## SECTION 15 REGULATORY INFORMATION

#### Safety, health and environmental regulations / legislation specific for the substance or mixture POLYETHYLENE(9002-88-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Inventory of Chemical Substances (AICS) International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs ALUMINIUM(7429-90-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Inventory of Chemical Substances (AICS) Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes International Air Transport Association (IATA) Dangerous Goods Regulations International Maritime Dangerous Goods Requirements (IMDG Code) Australia Exposure Standards Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English) BITUMEN (BLOWN)(64742-93-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

#### **National Inventory Status**

National Inventory	Status	
Australia - AICS	No (aluminium foil as) Non-disclosed ingredients	
Canada - DSL	No (aluminium foil as) Non-disclosed ingredients	
Canada - NDSL	No (bitumen (blown); polyethylene; aluminium; aluminium foil as) Non-disclosed ingredients	
China - IECSC	No (aluminium foil as) Non-disclosed ingredients	
Europe - EINEC / ELINCS / NLP	No (polyethylene; aluminium foil as) Non-disclosed ingredients	
Japan - ENCS	No (bitumen (blown); aluminium; aluminium foil as) Non-disclosed ingredients	
Korea - KECI	No (aluminium foil as) Non-disclosed ingredients	
New Zealand - NZIoC	No (aluminium foil as) Non-disclosed ingredients	
Philippines - PICCS	No (aluminium foil as) Non-disclosed ingredients	
USA - TSCA	No (aluminium foil as) Non-disclosed ingredients	
Taiwan - TCSI	No (aluminium foil as) Non-disclosed ingredients	
Mexico - INSQ	No (bitumen (blown); aluminium foil as) Non-disclosed ingredients	
Vietnam - NCI	No (aluminium foil as) Non-disclosed ingredients	
Russia - ARIPS	No (aluminium foil as) Non-disclosed ingredients	
Thailand - TECI	No (bitumen (blown); aluminium; aluminium foil as) Non-disclosed ingredients	
Legend:	Yes = All declared ingredients are on the inventory No = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)	

### **SECTION 16 OTHER INFORMATION**

Revision Date	22/05/2019
Initial Date	22/05/2019

#### **SDS Version Summary**

Version	Issue Date	Sections Updated
2.1.1.1	22/05/2019	Acute Health (eye), Acute Health (inhaled), Acute Health (skin), Acute Health (swallowed), Appearance, Chronic Health, Classification, Fire Fighter (fire incompatibility), Handling Procedure, Ingredients, Personal Protection (Respirator), Physical Properties, Spills (major), Storage (storage requirement), Synonyms, Use

#### Other information

#### Ingredients with multiple cas numbers

Name	CAS No
polyethylene	9002-88-4, 101484-63-3, 101484-75-7, 101484-82-6, 1021428-03-4, 103843-11-4, 106705-26-4, 110736-46-4, 11098-28-5, 11119-24-7, 11119-25-8, 112041-35-7, 112821-11-1, 112821-13-3, 113690-26-9, 1137119-09-5, 114013-55-7, 114451-17-1, 114471-09-9, 1187527-29-2, 121761-95-3, 1227178-23-5, 1228118-98-6, 126040-16-2, 126040-17-3, 126879-40-1, 12728-29-9, 1281939-84-1, 131461-84-2, 131461-85-3, 1365657-57-3, 1365657-58-4, 136958-80-0, 1383916-56-0, 1393813-70-1, 142985-61-3, 150632-74-9, 151595-17-4, 153302-16-0, 156799-29-0, 159251-50-0, 160612-77-1, 161051-67-8, 163751-84-6, 172451-63-7, 174594-04-8, 176365-96-1, 177529-72-5, 177771-90-3, 177893-37-7, 183076-46-2, 184182-05-6, 187619-93-8, 189120-95-4, 191490-32-1, 199128-49-9, 201948-42-7, 202876-24-2, 208196-83-2, 211174-40-2
aluminium	7429-90-5, 91728-14-2
bitumen (blown)	64742-93-4, 68516-21-2, 68650-78-2

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 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.

#### Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average PC – STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit, IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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