Permatex Ultra Rubber Gasket Sealant & Dressing

ITW AAMTech

Chemwatch Hazard Alert Code: **2**

Chemwatch: **5139-34**
Version No: **6.1.1.1**
Material Safety Data Sheet according to NOHSC and ADG requirements

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

Product Identifier

Product name	Permatex Ultra Rubber Gasket Sealant & Dressing
Synonyms	PX85409
Proper shipping name	RESIN SOLUTION, flammable
Other means of identification	Not Available

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

Relevant identified uses	Use according to manufacturer's directions. Sealant

Details of the supplier of the safety data sheet

Registered company name	ITW AAMTech	ITW AAMTech
Address	Unit 2/38 Trugood Drive, East Tamaki, Auckland 2013 New Zealand	1-9 Nina Link, Dandenong South 3175 VIC Australia
Telephone	+800 438 996	1800 177 989
Fax	+64 9272 1949	1800 308 556
Website	www.aamtech.co.nz	www.aamtech.com.au
Email	info@aamtech.co.nz	info@aamtech.com.au

Emergency telephone number

Association / Organisation	Not Available	Not Available
Emergency telephone numbers	+800 2436 2255	1800 039 008
Other emergency telephone numbers	Not Available	+61 3 9573 3112

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

Poisons Schedule	Not Applicable	
Risk Phrases [1]	**R36/37**	Irritating to eyes and respiratory system.
	R20	Harmful by inhalation.
	R43	May cause SENSITISATION by skin contact.
	R10	Flammable.
Legend:	*1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*	
GHS Classification [1]	Flammable Liquid Category 3, Acute Toxicity (Inhalation) Category 4, Eye Irritation Category 2A, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3	

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Legend:	*1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI*

Label elements

GHS label elements	
SIGNAL WORD	**WARNING**

Hazard statement(s)

H226	Flammable liquid and vapour
H332	Harmful if inhaled
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P240	Ground/bond container and receiving equipment.

Precautionary statement(s) Response

P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
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. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
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.

Label elements

Relevant risk statements are found in section 2

Indication(s) of danger	Xn

SAFETY ADVICE

S02	Keep out of reach of children.
S13	Keep away from food, drink and animal feeding stuffs.
S23	Do not breathe gas/fumes/vapour/spray.
S24	Avoid contact with skin.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S35	This material and its container must be disposed of in a safe way.

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S37	Wear suitable gloves.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water and detergent.
S43	In case of fire use the extinguishing media detailed in section 5 of this SDS.
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well ventilated areas.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

Other hazards

	Cumulative effects may result following exposure*.
	Limited evidence of a carcinogenic effect*.
	Ingestion may produce health damage*.
	May produce skin discomfort*.
	Repeated exposure potentially causes skin dryness and cracking*.
	Vapours potentially cause drowsiness and dizziness*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
68152-50-1	20-30	rosin/ fumaric acid/ pentaerythritol/ diethylene glycol
14807-96-6	25-35	talc
9004-96-0	10-20	oleic acid, ethoxylated
67-63-0	<10	isopropanol
68187-84-8	<10	castor oil, blown
8050-09-7	<7	rosin-colophony
64-17-5	<5	ethanol
13463-67-7	<5	titanium dioxide
67-56-1	0.1-1	methanol

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: ▸ Wash out immediately with fresh running water. ▸ 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. ▸ 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.
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, aerosols or combustion products are inhaled remove from contaminated area. ▸ Other measures are usually unnecessary.
Ingestion	▸ Immediately give a glass of water. ▸ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
For acute or short term repeated exposures to isopropanol:
▸ Rapid onset respiratory depression and hypotension indicates serious ingestions that require careful cardiac and respiratory monitoring together with immediate intravenous access.

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- Rapid absorption precludes the usefulness of emesis or lavage 2 hours post-ingestion. Activated charcoal and cathartics are not clinically useful. Ipecac is most useful when given 30 mins. post-ingestion.
- There are no antidotes.
- Management is supportive. Treat hypotension with fluids followed by vasopressors.
- Watch closely, within the first few hours for respiratory depression; follow arterial blood gases and tidal volumes.
- Ice water lavage and serial haemoglobin levels are indicated for those patients with evidence of gastrointestinal bleeding.

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	‣ Alcohol stable foam. ‣ Dry chemical powder. ‣ BCF (where regulations permit). ‣ Carbon dioxide.

Special hazards arising from the substrate or mixture

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

Advice for firefighters

Fire Fighting	‣ Alert Fire Brigade and tell them location and nature of hazard. ‣ May be violently or explosively reactive. ‣ Wear breathing apparatus plus protective gloves. ‣ Prevent, by any means available, spillage from entering drains or water course.
Fire/Explosion Hazard	‣ Liquid and vapour are flammable. ‣ Moderate fire hazard when exposed to heat or flame. ‣ Vapour forms an explosive mixture with air. ‣ Moderate explosion hazard when exposed to heat or flame.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Slippery when spilt. ‣ Remove all ignition sources. ‣ Clean up all spills immediately. ‣ Avoid breathing vapours and contact with skin and eyes.
Major Spills	Slippery when spilt. ‣ Clear area of personnel and move upwind. ‣ Alert Fire Brigade and tell them location and nature of hazard. ‣ May be violently or explosively reactive.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	‣ Avoid all personal contact, including inhalation. ‣ Wear protective clothing when risk of overexposure occurs. ‣ Use in a well-ventilated area. ‣ Prevent concentration in hollows and sumps.
Other information	‣ Store in original containers in approved flammable liquid storage area. ‣ Store away from incompatible materials in a cool, dry, well-ventilated area. ‣ **DO NOT** store in pits, depressions, basements or areas where vapours may be trapped. ‣ No smoking, naked lights, heat or ignition sources.

Conditions for safe storage, including any incompatibilities

Suitable container	‣ Packing as supplied by manufacturer. ‣ Plastic containers may only be used if approved for flammable liquid. ‣ Check that containers are clearly labelled and free from leaks.

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	▸ For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type.
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	talc	Soapstone (respirable dust) / Talc, (containing no asbestos fibres)	3 mg/m3 / 2.5 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	isopropanol	Isopropyl alcohol	983 mg/m3 / 400 ppm	1230 mg/m3 / 500 ppm	Not Available	Not Available
Australia Exposure Standards	ethanol	Ethyl alcohol	1880 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available
Australia Exposure Standards	titanium dioxide	Titanium dioxide (a)	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	methanol	Methyl alcohol	262 mg/m3 / 200 ppm	328 mg/m3 / 250 ppm	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
talc	Talc	2 mg/m3	2 mg/m3	2.6 mg/m3
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
rosin-colophony	Rosin core solder decomposition products; (Colophony Gum)	0.3 mg/m3	4.9 mg/m3	4.9 mg/m3
ethanol	Ethyl alcohol; (Ethanol)	Not Available	Not Available	Not Available
titanium dioxide	Titanium oxide; (Titanium dioxide)	10 mg/m3	10 mg/m3	10 mg/m3
methanol	Methyl alcohol; (Methanol)	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
rosin/ fumaric acid/ pentaerythritol/ diethylene glycol	Not Available	Not Available
talc	N.E. mg/m3 / N.E. ppm	1,000 mg/m3
oleic acid, ethoxylated	Not Available	Not Available
isopropanol	12,000 ppm	2,000 [LEL] ppm
castor oil, blown	Not Available	Not Available
rosin-colophony	Not Available	Not Available
ethanol	15,000 ppm	3,300 [LEL] ppm
titanium dioxide	N.E. mg/m3 / N.E. ppm	5,000 mg/m3
methanol	25,000 ppm	6,000 ppm

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	▸ Safety glasses with side shields. ▸ Chemical goggles. ▸ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy

Continued...

	▸ document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	▸ Wear chemical protective gloves, e.g. PVC. ▸ Wear safety footwear or safety gumboots, e.g. Rubber **NOTE:** ▸ The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. ▸ Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
Body protection	See Other protection below
Other protection	▸ Overalls. ▸ PVC Apron. ▸ PVC protective suit may be required if exposure severe. ▸ Eyewash unit.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:
"Forsberg Clothing Performance Index".
The effect(s) of the following substance(s) are taken into account in the ***computer-generated*** selection:
Permatex Ultra Rubber Gasket Sealant & Dressing

Material	CPI
BUTYL	C
BUTYL/NEOPRENE	C
NAT+NEOPR+NITRILE	C
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
NITRILE+PVC	C
PE/EVAL/PE	C
PVA	C
PVC	C
PVDC/PE/PVDC	C
SARANEX-23	C
SARANEX-23 2-PLY	C
TEFLON	C
VITON/NEOPRENE	C

* 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.

Respiratory protection

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

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

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

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Black flammable liquid with an alcohol odour; partially miscible with water.

Physical state	Liquid	**Relative density (Water = 1)**	1.3

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Odour	Not Available	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Available
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)	82	**Molecular weight (g/mol)**	Not Applicable
Flash point (°C)	57	**Taste**	Not Available
Evaporation rate	>1 BuAC = 1	**Explosive properties**	Not Available
Flammability	Flammable.	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	12	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit (%)	2	**Volatile Component (%vol)**	VOC = 10.9% (by wt)
Vapour pressure (kPa)	4.400 @20C	**Gas group**	Not Available
Solubility in water (g/L)	Partly Miscible	**pH as a solution (1%)**	Not Applicable
Vapour density (Air = 1)	>1	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	‣ Unstable in the presence of incompatible materials. ‣ Product is considered stable. ‣ Hazardous polymerisation will not occur.
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	There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.
Ingestion	Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Overexposure to non-ring alcohols causes nervous system symptoms. These include headache, muscle weakness and inco-ordination, giddiness, confusion, delirium and coma.
Skin Contact	There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering. Open cuts, abraded or irritated skin should not be exposed to this material
Eye	This material can cause eye irritation and damage in some persons. The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Non-ionic surfactants can cause numbing of the cornea, which masks discomfort normally caused by other agents and leads to corneal injury.
Chronic	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.

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	There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Rosin (colophany) has caused allergic contact dermatitis in solderers using resin flux-cored solders, can be a sensitiser for strings instrument players, and has caused dermatitis after use in adhesive tapes [NIOSHTEC].

	TOXICITY	IRRITATION
Permatex Ultra Rubber Gasket Sealant & Dressing	Not Available	Not Available
rosin/ fumaric acid/ pentaerythritol/ diethylene glycol	TOXICITY	IRRITATION
	Not Available	Not Available
talc	TOXICITY	IRRITATION
	Not Available	Skin (human): 0.3 mg/3d-I mild
oleic acid, ethoxylated	TOXICITY	IRRITATION
	Oral (rat) LD50: 3000 mg/kg**[2]	[Harcros]*
		Eye (rabbit): 500 mg/24h - mild
		Eye (rabbit): moderate to SEVERE*
		Skin (rabbit): 500 mg/24h -mild
		Skin (rabbit): mild*
isopropanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 12792 mg/kg[1]	Eye (rabbit): 10 mg - moderate
	Inhalation (rat) LC50: 72.6 mg/L/4h[2]	Eye (rabbit): 100 mg - SEVERE
	Oral (rat) LD50: 5000 mg/kg[2]	Eye (rabbit): 100mg/24hr-moderate
		Skin (rabbit): 500 mg - mild
castor oil, blown	TOXICITY	IRRITATION
	Not Available	Not Available
rosin-colophony	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg[1]	Not Available
	Oral (rat) LD50: 3.0 mg/kg[2]	
ethanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 17100 mg/kg[1]	Eye (rabbit): 500 mg SEVERE
	Inhalation (rat) LC50: 64000 ppm/4h[2]	Eye (rabbit):100mg/24hr-moderate
	Oral (rat) LD50: >11872769 mg/kg[1]	Skin (rabbit):20 mg/24hr-moderate
		Skin (rabbit):400 mg (open)-mild
titanium dioxide	TOXICITY	IRRITATION
	Inhalation (rat) LC50: >2.28 mg/l4 h[1]	Skin (human): 0.3 mg /3D (int)-mild *
	Inhalation (rat) LC50: >3.56 mg/l4 h[1]	
	Inhalation (rat) LC50: >6.82 mg/l4 h[1]	
	Inhalation (rat) LC50: 3.43 mg/l4 h[1]	
	Inhalation (rat) LC50: 5.09 mg/l4 h[1]	
	Oral (rat) LD50: >2000 mg/kg[1]	
methanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 15800 mg/kg[2]	Eye (rabbit): 100 mg/24h-moderate
	Inhalation (rat) LC50: 64000 ppm/4h[2]	Eye (rabbit): 40 mg-moderate
	Oral (rat) LD50: >11872769 mg/kg[1]	Skin (rabbit): 20 mg/24 h-moderate
Legend:	*1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*	

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ROSIN/ FUMARIC ACID/ PENTAERYTHRITOL/ DIETHYLENE GLYCOL	No significant acute toxicological data identified in literature search.
TALC	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.
OLEIC ACID, ETHOXYLATED	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
ISOPROPANOL	Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled.
ROSIN-COLOPHONY	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.
TITANIUM DIOXIDE	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Exposure to titanium dioxide is via inhalation, swallowing or skin contact. * IUCLID
ETHANOL & METHANOL	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Acute Toxicity	✔	**Carcinogenicity**	⊘
Skin Irritation/Corrosion	⊘	**Reproductivity**	⊘
Serious Eye Damage/Irritation	✔	**STOT - Single Exposure**	✔
Respiratory or Skin sensitisation	✔	**STOT - Repeated Exposure**	⊘
Mutagenicity	⊘	**Aspiration Hazard**	⊘

Legend: ✔ *– Data required to make classification available*
✘ *– Data available but does not fill the criteria for classification*
⊘ *– Data Not Available to make classification*

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

For Surfactants: Kow cannot be easily determined due to hydrophilic/hydrophobic properties of the molecules in surfactants. BCF value: 1-350.
Aquatic Fate: Surfactants tend to accumulate at the interface of the air with water and are not extracted into one or the other liquid phases.
Terrestrial Fate: Anionic surfactants are not appreciably sorbed by inorganic solids.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
isopropanol	LOW (Half-life = 14 days)	LOW (Half-life = 3 days)
rosin-colophony	HIGH	HIGH
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
titanium dioxide	HIGH	HIGH

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methanol	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
isopropanol	LOW (LogKOW = 0.05)
rosin-colophony	HIGH (LogKOW = 6.4607)
ethanol	LOW (LogKOW = -0.31)
titanium dioxide	LOW (BCF = 10)
methanol	LOW (BCF = 10)

Mobility in soil

Ingredient	Mobility
isopropanol	HIGH (KOC = 1.06)
rosin-colophony	LOW (KOC = 21990)
ethanol	HIGH (KOC = 1)
titanium dioxide	LOW (KOC = 23.74)
methanol	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	▸ Recycle wherever possible or consult manufacturer for recycling options. ▸ Consult State Land Waste Authority for disposal. ▸ Bury or incinerate residue at an approved site. ▸ Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	•3Y

Land transport (ADG)

UN number	1866
Packing group	III
UN proper shipping name	RESIN SOLUTION, flammable
Environmental hazard	No relevant data
Transport hazard class(es)	Class: 3 Subrisk: Not Applicable
Special precautions for user	Special provisions: 223 * Limited quantity: 5 L

Air transport (ICAO-IATA / DGR)

UN number	1866
Packing group	III
UN proper shipping name	Resin solution flammable
Environmental hazard	No relevant data

Continued...

Transport hazard class(es)	ICAO/IATA Class	3
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	3L
Special precautions for user	Special provisions	A3
	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 Limited Maximum Qty / Pack	10 L

Sea transport (IMDG-Code / GGVSee)

UN number	1866	
Packing group	III	
UN proper shipping name	RESIN SOLUTION flammable	
Environmental hazard	Not Applicable	
Transport hazard class(es)	IMDG Class	3
	IMDG Subrisk	Not Applicable
Special precautions for user	EMS Number	F-E , S-E
	Special provisions	223 955
	Limited Quantities	5 L

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	rosin-colophony	Y
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	titanium dioxide	Z
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	methanol	Y

SECTION 15 REGULATORY INFORMATION

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

ROSIN/ FUMARIC ACID/ PENTAERYTHRITOL/ DIETHYLENE GLYCOL(68152-50-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

TALC(14807-96-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards
Australia Hazardous Substances Information System - Consolidated Lists
Australia Inventory of Chemical Substances (AICS)
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

OLEIC ACID, ETHOXYLATED(9004-96-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

ISOPROPANOL(67-63-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Continued...

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

CASTOR OIL, BLOWN(68187-84-8) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

ROSIN-COLOPHONY(8050-09-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists	Australia Inventory of Chemical Substances (AICS)

ETHANOL(64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists	

TITANIUM DIOXIDE(13463-67-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
Australia Inventory of Chemical Substances (AICS)	

METHANOL(67-56-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards	Australia Inventory of Chemical Substances (AICS)
Australia Hazardous Substances Information System - Consolidated Lists	

National Inventory	Status
Australia - AICS	N (rosin/ fumaric acid/ pentaerythritol/ diethylene glycol)
Canada - DSL	Y
Canada - NDSL	N (talc; rosin/ fumaric acid/ pentaerythritol/ diethylene glycol; castor oil, blown; oleic acid, ethoxylated; rosin-colophony; methanol; ethanol; isopropanol)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (rosin/ fumaric acid/ pentaerythritol/ diethylene glycol)
Japan - ENCS	N (rosin/ fumaric acid/ pentaerythritol/ diethylene glycol; castor oil, blown)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	*Y = All ingredients are on the inventory N = 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

Other information

Ingredients with multiple cas numbers

Name	CAS No
castor oil, blown	68187-84-8, 68439-93-0
titanium dioxide	100292-32-8, 101239-53-6, 116788-85-3, 12000-59-8, 12188-41-9, 12701-76-7, 12767-65-6, 12789-63-8, 1309-63-3, 1317-70-0, 1317-80-2, 1344-29-2, 13463-67-7, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 416845-43-7, 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 55068-84-3, 55068-85-4, 552316-51-5, 62338-64-1, 767341-00-4, 97929-50-5, 98084-96-9

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

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.

Continued...

end of SDS