

Permatex Form-A-Gasket No. 1 Sealant

ITW AAMTech

Chemwatch: 5057-97

Version No: 10.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 22/09/2014

Print Date: 10/02/2015

Initial Date: **Not Available**

S.Local.AUS.EN

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

Product Identifier

Product name	Permatex Form-A-Gasket No. 1 Sealant
Synonyms	PX80008
Other means of identification	Not Available

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

Relevant identified uses	Used to coat industrial or automotive gaskets to improve sealing ability on various engineering components; seal pipe threads.
--------------------------	--

Details of the manufacturer/importer

Registered company name	ITW AAMTech
Address	100 Hassall Street 2164 NSW Australia
Telephone	1800 177 989
Fax	1800 308 556
Website	www.aamtech.com.au
Email	info@aamtech.com.au

Emergency telephone number

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

SECTION 2 HAZARDS IDENTIFICATION


Classification of the substance or mixture

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

Poisons Schedule	Not Applicable				
Risk Phrases ^[1]	<table> <tr> <td>R43</td><td>May cause SENSITISATION by skin contact.</td></tr> <tr> <td>R36</td><td>Irritating to eyes.</td></tr> </table>	R43	May cause SENSITISATION by skin contact.	R36	Irritating to eyes.
R43	May cause SENSITISATION by skin contact.				
R36	Irritating to eyes.				
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI				
GHS Classification ^[1]	Eye Irritation Category 2, Skin Sensitizer Category 1				
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI				

Label elements

Permatex Form-A-Gasket No. 1 Sealant

GHS label elements	
--------------------	---

SIGNAL WORD	WARNING
-------------	----------------

Hazard statement(s)

H319	Causes serious eye irritation
H317	May cause an allergic skin reaction

Precautionary statement(s) Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration
-------------	--

Label elements



Relevant risk statements are found in section 2

Indication(s) of danger	Xi
--------------------------------	----

SAFETY ADVICE

S02	Keep out of reach of children.
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.
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.
S46	If swallowed, seek medical advice immediately and show this container or label.
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

	Inhalation and/or ingestion may produce health damage*.
	May produce discomfort of the respiratory system and skin*.
	Cumulative effects may result following exposure*.
	Vapours potentially cause drowsiness and dizziness*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Continued...

Permatex Form-A-Gasket No. 1 Sealant

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1332-58-7	40-60	kaolin
8050-09-7	20-30	rosin-colophony
64-17-5	10-30	ethanol
68187-84-8	<5	castor oil, blown
67-63-0	<2	isopropanol
13463-67-7	0.1-1	titanium dioxide
14808-60-7	0.1-1	silica crystalline - quartz
67-56-1	0.1-1	methanol

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none">▶ 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	<p>If skin contact occurs:</p> <ul style="list-style-type: none">▶ Immediately remove all contaminated clothing, including footwear.▶ Flush skin and hair with running water (and soap if available).▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none">▶ If fumes 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	<ul style="list-style-type: none">▶ 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.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to ethanol:

- ▶ Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- ▶ Give 50% dextrose (50-100 ml) IV to obtunded patients following blood draw for glucose determination.
- ▶ Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- ▶ Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
- ▶ Fructose administration is contra-indicated due to side effects.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	<ul style="list-style-type: none">▶ Water spray or fog.▶ Alcohol stable foam.▶ Dry chemical powder.▶ Carbon dioxide.
--	---

Special hazards arising from the substrate or mixture

Continued...

Permatex Form-A-Gasket No. 1 Sealant

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

Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	<ul style="list-style-type: none"> Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<ul style="list-style-type: none"> Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up.
Major Spills	<ul style="list-style-type: none"> Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> Remove all ignition sources. Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
Other information	<ul style="list-style-type: none"> Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<ul style="list-style-type: none"> Avoid strong bases. Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates.

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
Australia Exposure Standards	kaolin	Kaolin (a)	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	ethanol	Ethyl alcohol	1880 mg/m3 / 1000 ppm	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

Continued...

Permatex Form-A-Gasket No. 1 Sealant


Australia Exposure Standards	titanium dioxide	Titanium dioxide (a)	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	silica crystalline - quartz	Silica - Crystalline Quartz (respirable dust) / Quartz (respirable dust)	0.1 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
kaolin	Kaolin; (Aluminum silicate hydroxide; Fuller's earth [8031-18-3])	2 mg/m3	2 mg/m3	4.6 mg/m3
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
isopropanol	Isopropyl alcohol	400 ppm	400 ppm	12000 ppm
titanium dioxide	Titanium oxide; (Titanium dioxide)	10 mg/m3	10 mg/m3	10 mg/m3
silica crystalline - quartz	Silica, crystalline-quartz; (Silicon dioxide)	0.025 mg/m3	0.025 mg/m3	0.025 mg/m3
methanol	Methyl alcohol; (Methanol)	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
kaolin	Not Available	Not Available
rosin-colophony	Not Available	Not Available
ethanol	15,000 ppm	3,300 [LEL] ppm
castor oil, blown	Not Available	Not Available
isopropanol	12,000 ppm	2,000 [LEL] ppm
titanium dioxide	N.E. mg/m3 / N.E. ppm	5,000 mg/m3
silica crystalline - quartz	N.E. mg/m3 / N.E. ppm	50 mg/m3
methanol	25,000 ppm	6,000 ppm

Exposure controls

Appropriate engineering controls	General exhaust is adequate under normal operating conditions.
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> 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 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	<ul style="list-style-type: none"> Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber <p>NOTE:</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Overalls. P.V.C. apron. Barrier cream.
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 Form-A-Gasket No. 1 Sealant

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.

Continued...

Permatex Form-A-Gasket No. 1 Sealant

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.

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	Reddish brown paste with an alcohol odour; partially miscible with water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	1.4-1.5
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)	Not Available	Taste	Not Available
Evaporation rate	7.7 Ether=1	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	13.5% (VOC - by wt)
Vapour pressure (kPa)	4.40 @ 20C	Gas group	Not Available
Solubility in water (g/L)	Partly miscible	pH as a solution(1%)	Not Available

Continued...

Permatex Form-A-Gasket No. 1 Sealant

Vapour density (Air = 1)	2.07	VOC g/L	Not Available
--------------------------	------	---------	---------------

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul style="list-style-type: none"> 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	<p>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.</p> <p>Inhalation hazard is increased at higher temperatures.</p> <p>Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.</p>
Ingestion	<p>Accidental ingestion of the material may be damaging to the health of the individual.</p> <p>Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.</p> <p>Ingestion of ethanol (ethyl alcohol, "alcohol") may produce nausea, vomiting, bleeding from the digestive tract, abdominal pain, and diarrhoea.</p>
Skin Contact	<p>There is some evidence to suggest that the material may cause moderate 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.</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p>
Eye	<p>There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.</p>
Chronic	<p>Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.</p> <p>Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.</p> <p>Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents.</p>

Permatex Form-A-Gasket No. 1 Sealant	TOXICITY	IRRITATION
	Not Available	Not Available
kaolin	TOXICITY	IRRITATION
	Not Available	Not Available
rosin-colophony	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1] Oral (rat) LD50: 3.0 mg/kg ^[2]	Not Available
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

Permatex Form-A-Gasket No. 1 Sealant

castor oil, blown	TOXICITY	IRRITATION
	Not Available	Not Available
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
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]	
silica crystalline - quartz	TOXICITY	IRRITATION
	Not Available	Nil reported
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
Legend:	Oral (rat) LD50: >11872769 mg/kg ^[1]	Skin (rabbit): 20 mg/24 h-moderate
1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's msds unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

KAOLIN	<p>No significant acute toxicological data identified in literature search. for bentonite clays:</p> <p>Bentonite (CAS No. 1302-78-9) consists of a group of clays formed by crystallisation of vitreous volcanic ashes that were deposited in water.</p> <p>The expected acute oral toxicity of bentonite in humans is very low (LD50>15 g/kg). However, severe anterior segment inflammation, uveitis and retrocorneal abscess from eye exposure were reported when bentonite had been used as a prophypaste.</p>
ROSIN-COLOPHONY	<p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>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.</p>
ISOPROPANOL	<p>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.</p>
TITANIUM DIOXIDE	<p>The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <p>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.</p> <p>Exposure to titanium dioxide is via inhalation, swallowing or skin contact.</p> <p>* IUCLID</p>
SILICA CRYSTALLINE - QUARTZ	<p>WARNING: For inhalation exposure <u>ONLY</u>: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS</p> <p>The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease.</p> <p>Intermittent exposure produces; focal fibrosis, (pneumoconiosis), cough, dyspnoea, liver tumours.</p>

Permatex Form-A-Gasket No. 1 Sealant

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

CMR STATUS

SKIN	methanol	Australia Exposure Standards - Skin	Sk
-------------	----------	-------------------------------------	----

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

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

Bioaccumulative potential

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

Mobility in soil

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

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> 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

Continued...

Permatex Form-A-Gasket No. 1 Sealant

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

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

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
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

kaolin(1332-58-7) 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)"
rosin-colophony(8050-09-7) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)", "Australia Hazardous Substances Information System - Consolidated Lists"
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"
castor oil, blown(68187-84-8) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"
isopropanol(67-63-0) 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)", "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)"
silica crystalline - quartz(14808-60-7) 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)", "Australia Hazardous Substances Information System - Consolidated Lists"

**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"

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
silica crystalline - quartz	122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 14808-60-7, 70594-95-5, 87347-84-0

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.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.