

ITW AAMTech

Chemwatch: 5059-19

Version No: 6.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 30/09/2014 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 Windshield Repair Kit	
Synonyms	09103	
Other means of identification	Not Available	

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

Relevant identified	Repairin
uses	Repairing

Repairing damaged automobile windscreens.

Details of the manufacturer/importer

Registered company name	ITW AAMTech	
Address	0 Hassall Street 2164 NSW Australia	
Telephone	800 177 989	
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		
	R36/37/38	Irritating to eyes, respiratory system and skin.	
Risk Phrases ^[1]	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
	R43	May cause SENSITISATION by skin contact.	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI		
GHS Classification ^[1]	Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3, Chronic Aquatic Hazard Category 3		
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI		

GHS label elements	
SIGNAL WORD	WARNING
Hazard statement(s)	
H315	Causes skin irritation
H319	Causes serious eye irritation
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation

Precautionary statement(s) Prevention

H412

P271	Use only outdoors or in a well-ventilated area.	
P280	P280 Wear protective gloves/protective clothing/eye protection/face protection.	
P261	P261 Avoid breathing dust/fume/gas/mist/vapours/spray.	
P273 Avoid release to the environment.		

Harmful to aquatic life with long lasting effects

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.	
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.	
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.		

Precautionary statement(s) Storage

P405	Store locked up.	
P403+P233	33+P233 Store in a well-ventilated place. Keep container tightly closed.	

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

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Indication(s) or	f
dange	r

SAFETY ADVICE

OAI EIT ADVICE		
S02	Keep out of reach of children.	
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.	
S 37	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	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*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
868-77-9	30-50	2-hydroxyethyl methacrylate
Not Available	20-40	polyurethane oligomer
7534-94-3	<10	iso-bornyl methacrylate
79-10-7	<5	acrylic acid
947-19-3	<5	1-hydroxycyclohexyl phenyl ketone
109-16-0	<2	triethylene glycol dimethacrylate

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 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, without delay.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

Carbon dioxide.		 Water spray or fog. Alcohol stable foam. Dry chemical powder. Carbon dioxide.
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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
Fire incompatibility	result

Advice for firefighters

Fire Fighting	 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. Use water delivered as a fine spray to control fire and cool adjacent area.
Fire/Explosion Hazard	 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	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.
	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 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	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Contamination with polymerisation catalysts - peroxides, persulfates, oxidising agents - also strong acids, strong alkalies, will cause polymerisation with exotherm - generation of heat. Polymerisation of large quantities may be violent - even explosive.

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	acrylic acid	Acrylic acid	5.9 mg/m3 / 2 ppm	Not Available	Not Available	Sk

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
2-hydroxyethyl methacrylate	Hydroxyethyl methacrylate, 2-	0.71 mg/m3	7.8 mg/m3	1000 mg/m3
acrylic acid	Acrylic acid	Not Available	Not Available	Not Available

triethylene glycol dimethacrylate	Methacrylic acid, diester with triethylene glycol; (Polyester TGM3)		33 mg/m3	360 mg/m3	2100 mg/m3
Ingredient	Original IDLH	Revise	ed IDLH		
2-hydroxyethyl methacrylate	Not Available	Not Available			
polyurethane oligomer	Not Available	Not Available			
iso-bornyl methacrylate	Not Available	Not Available			
acrylic acid	Not Available	Not Available			
1-hydroxycyclohexyl phenyl ketone	Not Available	Not Available			
triethylene glycol dimethacrylate	Not Available	Not Available			

Exposure controls

Appropriate engineering controls	Use in a well-ventilated area General exhaust is adequate under normal operating conditions.		
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 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	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Suitability and durability of glove type is dependent on usage.		
Body protection	See Other protection below		
Other protection	 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 Windshield Repair Kit

Material	СРІ
BUTYL	С
PE	С
SARANEX-23	С
VITON	С

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion **NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -* Where the glove is to be used on a short term, casual or infrequent

basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

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 P3	-	A-PAPR-AUS / Class 1 P3
up to 50 x ES	-	A-AUS / Class 1 P3	-
up to 100 x ES	-	A-2 P3	A-PAPR-2 P3 ^

^ - 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	Amber liquid with a mild odour; partially miscible with water.		
Physical state	Liquid	Relative density (Water = 1)	1.05
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)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>93 (PMCC)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	8.0 (ac.acid)	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	2.0 (ac.acid)	Volatile Component (%vol)	VOC <1 wt%
Vapour pressure (kPa)	<0.667	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	 Polymerisation may occur at elevated temperatures. Polymerisation may be accompanied by generation of heat as exotherm. Process is self accelerating as heating causes more rapid polymerisation. Exotherm may cause boiling with generation of acrid, toxic and flammable vapour.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation hazard is increased at higher temperatures. 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.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Ingestion may result in nausea, abdominal irritation, pain and vomiting
Skin Contact	The material may cause severe 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

Chronic Permatex Windshield Repair Kit	population. Sensitisation may give severe responses to ver	ry low levels of exposure, i.e			
	ΤΟΧΙΟΙΤΥ		Sensitisation may give severe responses to very low levels of exposure, i.e. hypersensitivity. Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to		
		IRRITATION			
	Not Available	Not Availabl	9		
	TOXICITY	IRRITATION			
	Dermal (rabbit) LD50: >3000 mg/kg ^[1]	* Rohm & H	aas		
2-hydroxyethyl methacrylate	Oral (rat) LD50: >4000 mg/kg ^[1]	Eye (rabbit):	SEVERE *		
methaciyiate		post-exposu	re		
		Skin (rabbit)	non-irritating*		
	TOXICITY	IRRITATION			
iso-bornyl methacrylate	Dermal (rabbit) LD50: >3000 mg/kg ^[1]	* Rohm and	Haas		
methacrylate	Oral (rat) LD50: 2408.35 mg/kg ^[1]	Eye (rabbit):	Slight - moderate		
	TOXICITY	IRRITATION			
	Dermal (rabbit) LD50: 280 mg/kg ^[1]	Not Availabl	e		
acrylic acid	Inhalation (mouse) LC50: 5.3 mg/L/2h ^[2]				
	Oral (rat) LD50: 33.5 mg/kg ^[2]				
	TOXICITY	IRRITATION			
1-hydroxycyclohexyl phenyl ketone	dermal (rat) LD50: >5000 mg/kg ^[1]	Eye: Non-irr	tating		
phenyr ketone	Oral (rat) LD50: >2500 mg/kg ^[1]	Skin: Non-irr	itating		
triethylene glycol	TOXICITY	IRRITATION			
dimethacrylate	Oral (rat) LD50: 10837 mg/kgd ^[2]	Not Availabl	9		
Legend:	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				
2-HYDROXYETHYL METHACRYLATE	Dermal (rappit): >5000 md/kd" Effects pers	ist beyond 21 days			
ISO-BORNYL METHACRYLATE	Dermal (rabbit): >3000 mg/kg Skin (rabbit): 5	Slight - moderate			
1-HYDROXYCYCLOHEXYL PHENYL KETONE	for Irgacure 184				
2-HYDROXYETHYL METHACRYLATE, TRIETHYLENE GLYCOL DIMETHACRYLATE	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				
ISO-BORNYL METHACRYLATE, ACRYLIC ACID, 1-HYDROXYCYCLOHEXYL PHENYL KETONE	due to a non-allergenic condition known as reactive airways dystunction 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				
Acute Toxicity	0	Carcinogenicity	0		
Skin Irritation/Corrosion	v	Reproductivity	0		

Serious Eye Damage/Irritation	v	STOT - Single Exposure	~
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
		🗙 – Data ava	uired to make classification available ilable but does not fill the criteria for classification Available to make classification

CMR STATUS

SKIN	acrylic acid	Australia Exposure Standards - Skin	Sk
		·	

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **DO NOT** discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
2-hydroxyethyl methacrylate	LOW	LOW
iso-bornyl methacrylate	HIGH	HIGH
acrylic acid	HIGH (Half-life = 180 days)	LOW (Half-life = 0.99 days)
1-hydroxycyclohexyl phenyl ketone	HIGH	HIGH
triethylene glycol dimethacrylate	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
2-hydroxyethyl methacrylate	LOW (BCF = 1.54)
iso-bornyl methacrylate	HIGH (LogKOW = 4.7589)
acrylic acid	LOW (LogKOW = 0.35)
1-hydroxycyclohexyl phenyl ketone	LOW (LogKOW = 2.4408)
triethylene glycol dimethacrylate	LOW (LogKOW = 1.88)

Mobility in soil

Ingredient	Mobility
2-hydroxyethyl methacrylate	HIGH (KOC = 1.043)
iso-bornyl methacrylate	LOW (KOC = 1547)
acrylic acid	HIGH (KOC = 1.201)
1-hydroxycyclohexyl phenyl ketone	LOW (KOC = 49.78)
triethylene glycol dimethacrylate	LOW (KOC = 10)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging	 Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal.
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	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	acrylic acid	Y

SECTION 15 REGULATORY INFORMATION

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

2-hydroxyethyl methacrylate(868-77-9) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)", "Australia Hazardous Substances Information System - Consolidated Lists"	
iso-bornyl methacrylate(7534-94-3) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"	
acrylic acid(79-10-7) is found on the following regulatory lists	"Australia Exposure Standards", "Australia Inventory of Chemical Substances (AICS)", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft", "Australia Hazardous Substances Information System - Consolidated Lists"	
1-hydroxycyclohexyl phenyl ketone(947-19-3) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"	
triethylene glycol dimethacrylate(109-16-0) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)"	

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

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

www.chemwatch.net/references

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

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