

Permatex Dr. Bond Plastic Bonder 2 Part Kit, Part 1

ITW AAMTech

Chemwatch Hazard Alert Code: 2

Chemwatch: 5128-13

Version No: 10.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Issue Date: 29/09/2014

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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 Dr. Bond Plastic Bonder 2 Part Kit, Part 1
Synonyms	PX82565
Proper shipping name	AVIATION REGULATED LIQUID, N.O.S. Not subject to this Code (see SP 106) (contains ethyl cyanoacrylate)
Other means of identification	Not Available

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

Relevant identified uses	Cyanoacrylate adhesive.
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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.

COMBUSTIBLE LIQUID, regulated for storage purposes only

Poisons Schedule	Not Applicable	
Risk Phrases ^[1]	R36/37/38	Irritating to eyes, respiratory system and skin.
	R42/43	May cause SENSITISATION by inhalation and skin contact.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R8	Contact with combustible material may cause fire.
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 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Respiratory Sensitizer Category 1, Skin Sensitizer Category 1, STOT - SE (Resp. Irr.) Category 3, Chronic Aquatic Hazard Category 3	



Continued...

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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	DANGER

Hazard statement(s)

H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H412	Harmful to aquatic life with long lasting effects

Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician/first aider
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.

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.
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Label elements



Relevant risk statements are found in section 2

Indication(s) of danger	O, Xn
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SAFETY ADVICE

S02	Keep out of reach of children.
S17	Keep away from combustible material.
S23	Do not breathe gas/fumes/vapour/spray.
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.

Continued...

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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.
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

	Cumulative effects may result following exposure*.
	Inhalation may produce health damage*.
	Limited evidence of a carcinogenic effect*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7085-85-0	>70	<u>ethyl cyanoacrylate</u>
9011-14-7	<25	<u>methyl methacrylate homopolymer</u>
112945-52-5	<5	<u>silica amorphous, fumed, crystalline free</u>
123-31-9	<1	<u>hydroquinone</u>

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>Eyelid Adhesion</p> <ul style="list-style-type: none"> Wash thoroughly with water and apply moist pad; maintain in position. DO NOT force separation. Transport to hospital, or doctor without delay. Minor eye contamination should be treated by copious washing with water or 1% sodium carbonate solution. The eye will generally open without further action, typically in one to two days. there should be no residual damage. Adhesive introduced Removal of contact lenses after eye injury should only be undertaken by skilled personnel. <p>Adhesive in the Eye:</p> <ul style="list-style-type: none"> Adhesive will attach itself to eye proteins and will disassociate from these over intermittent periods, usually within several hours. This will result in weeping until clearance of the protein complex. It is important to understand that disassociation will normally occur within a matter of hours even with gross contamination.
Skin Contact	<p>Cyanoacrylate adhesives is a very fast setting and strong. they bond human tissues including skin in seconds. Experience shows that accidents involving cyanoacrylates are best handled by passive, non-surgical first aid.</p> <p>Skin Contact:</p> <ul style="list-style-type: none"> Remove excessive adhesive. Soak in warm water - the adhesive should loosen from the skin in several hours. Dried adhesive does not present a health hazard. Contact with clothes, fabric, rags or tissues may generate heat, and strong irritating odours; skin burns may also ensue. <p>Skin Adhesion:</p> <ul style="list-style-type: none"> IMMEDIATELY immerse affected areas in warm soapy water. DO NOT force bonded surfaces apart. Use a gentle rolling action to peel surfaces apart if possible. It may be necessary to use a blunt edge such as a spatula or spoon handle. Do NOT attempt to pull the surfaces apart with a direct opposing action. Remove any cured material with warm, soapy water. Seek medical attention without delay. A solvent such as acetone may be used (with care!) to separate bonded skin surfaces. NEVER use solvent near eyes, mouth, cuts, or abrasions.
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

Continued...

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	<ul style="list-style-type: none"> ▶ 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. ▶ 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"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. ▶ For material bonded in the mouth seek medical/dental attention. ▶ If lips are accidentally stuck together apply lots of warm water and encourage maximum wetting and pressure from saliva inside the mouth. ▶ Peel or roll lips apart. ▶ Do NOT attempt to pull the lips with direct opposing action. ▶ It is almost impossible to swallow cyanoacrylates. The adhesive solidifies and adheres in the mouth. Saliva will lip the adhesion in one or two days.

Indication of any immediate medical attention and special treatment needed

It should never be necessary to use surgical means to separate tissues which become accidentally bonded. The action of physiological fluids or warm soapy water will cause this adhesive to eventually fail.
Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	<ul style="list-style-type: none"> ▶ 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	<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
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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 breathing vapours/ aerosols/ or dusts and avoid contact with skin and eyes. ▶ Control personal contact with the substance, by using protective equipment. ▶ Contain and absorb spill with sand, earth, inert material or vermiculite.
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 SDS.

SECTION 7 HANDLING AND STORAGE

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Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▸ 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	<ul style="list-style-type: none"> ▸ Store in original containers. ▸ Keep containers securely sealed. ▸ Store in a cool, dry, well-ventilated area. ▸ Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▸ Polyethylene or polypropylene container. ▸ Packing as recommended by manufacturer. ▸ Check all containers are clearly labelled and free from leaks.
Storage incompatibility	<p>For cyanoacrylates:</p> <ul style="list-style-type: none"> ▸ Avoid contact with acids, bases, amines. ▸ Avoid contact with clothes, fabric, rags (especially cotton and wool) rubber or paper; contact may cause polymerisation. ▸ Cyanoacrylate adhesives undergo anionic polymerization in the presence of a weak base, such as water, and are stabilized through the addition of a weak acid. The stabiliser is usually in the form of a weak acidic gas such as SO₂, NO, or BF₃.

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	hydroquinone	Hydroquinone	2 mg/m ³	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
methyl methacrylate homopolymer	Polymethylmethacrylate; (Lucite)	0.47 mg/m ³	5.2 mg/m ³	31 mg/m ³
silica amorphous, fumed, crystalline free	Silica, amorphous fumed	6 mg/m ³	6 mg/m ³	630 mg/m ³
hydroquinone	Hydroquinone	1.8 mg/m ³	20 mg/m ³	32 mg/m ³

Ingredient	Original IDLH	Revised IDLH
ethyl cyanoacrylate	Not Available	Not Available
methyl methacrylate homopolymer	Not Available	Not Available
silica amorphous, fumed, crystalline free	N.E. mg/m ³ / N.E. ppm	3,000 mg/m ³
hydroquinone	Unknown mg/m ³ / Unknown ppm	50 mg/m ³

Exposure controls

Appropriate engineering controls	<p>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.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>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.</p>
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.

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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 NOTE: <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:

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Material	CPI
NATURAL RUBBER	C
NATURAL+NEOPRENE	C
NEOPRENE	C
NEOPRENE/NATURAL	C
NITRILE	C
PVC	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 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	Combustible gel with an irritating odour; not miscible with water.		
Physical state	Gel	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)	185	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	85 (TCC)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Combustible.	Oxidising properties	Not Available

Continued...

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Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	VOC < 20g/l
Vapour pressure (kPa)	0.1 @20C	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	
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 of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. In low humidity, cyanoacrylate vapours are irritating to the respiratory system and eyes.
Ingestion	Uncured cyanoacrylates are difficult to swallow as saliva cures the surface of the adhesive with negligible bonding. The cured material is considered to be non-hazardous. The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
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. Small n-alkyl cyanoacrylates cause burns and irritation on skin contact. Exposure to their vapours can cause irritation, but usually only in dry conditions.
Eye	This material can cause eye irritation and damage in some persons. Exposure to cyanoacrylate vapours can cause discomfort and tears, nasal discharge, and blurred vision. The eyelids may be glued shut.
Chronic	Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Permatex Dr. Bond Plastic Bonder 2 Part Kit, Part 1	TOXICITY	IRRITATION
	Not Available	Not Available
ethyl cyanoacrylate	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 233.2 mg/kg*[2] Oral (rat) LD50: 190.8 mg/kg*[2]	[Manufacturer] Nil reported
methyl methacrylate homopolymer	TOXICITY	IRRITATION
	Not Available	Not Available
silica amorphous, fumed, crystalline free	TOXICITY	IRRITATION

Continued...

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	Dermal (rabbit) LD50: >5000 mg/kg ^[2]	* [Cabot]
	Oral (rat) LD50: 3160 mg/kg ^[2]	
hydroquinone	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg/24H ^[2]	Skin (human): 2% - mild
	Oral (rat) LD50: 302 mg/kg ^[2]	Skin (human): 5% - SEVERE
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	

ETHYL CYANOACRYLATE	* [AIHAAP]
SILICA AMORPHOUS, FUMED, CRYSTALLINE FREE	For silica amorphous: When experimental animals inhale synthetic amorphous silica (SAS) dust, it dissolves in the lung fluid and is rapidly eliminated. If swallowed, the vast majority of SAS is excreted in the faeces and there is little accumulation in the body. Following absorption across the gut, SAS is eliminated via urine without modification in animals and humans. SAS is not expected to be broken down (metabolised) in mammals.
Permatex Dr. Bond Plastic Bonder 2 Part Kit, Part 1 & HYDROQUINONE	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.
ETHYL CYANOACRYLATE & METHYL METHACRYLATE HOMOPOLYMER	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.

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethyl cyanoacrylate	LOW	LOW
methyl methacrylate homopolymer	LOW (Half-life = 56 days)	LOW (Half-life = 0.4 days)
hydroquinone	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
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ethyl cyanoacrylate	LOW (LogKOW = 1.4174)
methyl methacrylate homopolymer	LOW (LogKOW = 1.2751)
hydroquinone	LOW (BCF = 65)

Mobility in soil

Ingredient	Mobility
ethyl cyanoacrylate	LOW (KOC = 6.847)
methyl methacrylate homopolymer	LOW (KOC = 10.14)
hydroquinone	LOW (KOC = 434)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	<ul style="list-style-type: none"> Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible.
	Otherwise: <ul style="list-style-type: none"> If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

SECTION 14 TRANSPORT INFORMATION

Labels Required

	
Marine Pollutant	NO
HAZCHEM	2Z

Land transport (ADG)

UN number	3334				
Packing group	Not Applicable				
UN proper shipping name	AVIATION REGULATED LIQUID, N.O.S. Not subject to this Code (see SP 106) (contains ethyl cyanoacrylate)				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table> <tr> <td>Class</td><td>9</td></tr> <tr> <td>Subrisk</td><td>Not Applicable</td></tr> </table>	Class	9	Subrisk	Not Applicable
Class	9				
Subrisk	Not Applicable				
Special precautions for user	<table> <tr> <td>Special provisions</td><td>106 274 276</td></tr> <tr> <td>Limited quantity</td><td>0</td></tr> </table>	Special provisions	106 274 276	Limited quantity	0
Special provisions	106 274 276				
Limited quantity	0				

Air transport (ICAO-IATA / DGR)

UN number	3334						
Packing group	Not Applicable						
UN proper shipping name	Aviation regulated liquid, n.o.s. * (contains ethyl cyanoacrylate)						
Environmental hazard	No relevant data						
Transport hazard class(es)	<table> <tr> <td>ICAO/IATA Class</td><td>9</td></tr> <tr> <td>ICAO / IATA Subrisk</td><td>Not Applicable</td></tr> <tr> <td>ERG Code</td><td>9A</td></tr> </table>	ICAO/IATA Class	9	ICAO / IATA Subrisk	Not Applicable	ERG Code	9A
ICAO/IATA Class	9						
ICAO / IATA Subrisk	Not Applicable						
ERG Code	9A						
Special precautions for user	<table> <tr> <td>Special provisions</td><td>A27</td></tr> <tr> <td>Cargo Only Packing Instructions</td><td>964</td></tr> </table>	Special provisions	A27	Cargo Only Packing Instructions	964		
Special provisions	A27						
Cargo Only Packing Instructions	964						

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Cargo Only Maximum Qty / Pack	450L
Passenger and Cargo Packing Instructions	964
Passenger and Cargo Maximum Qty / Pack	450L
Passenger and Cargo Limited Quantity Packing Instructions	Y964
Passenger and Cargo Limited Maximum Qty / Pack	30 kg G

Sea transport (IMDG-Code / GGVSee)

UN number	3334
Packing group	Not Applicable
UN proper shipping name	AVIATION REGULATED LIQUID, N.O.S. (contains ethyl cyanoacrylate)
Environmental hazard	Not Applicable
Transport hazard class(es)	IMDG Class : 9 IMDG Subrisk : Not Applicable
Special precautions for user	EMS Number : Not Applicable Special provisions : 960 Limited Quantities : Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ETHYL CYANOACRYLATE(7085-85-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

METHYL METHACRYLATE HOMOPOLYMER(9011-14-7) 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

SILICA AMORPHOUS, FUMED, CRYSTALLINE FREE(112945-52-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

HYDROQUINONE(123-31-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

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

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (silica amorphous, fumed, crystalline free; ethyl cyanoacrylate; hydroquinone; methyl methacrylate homopolymer)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (silica amorphous, fumed, crystalline free; methyl methacrylate homopolymer)
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	N (silica amorphous, fumed, crystalline free)
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

Continued...

Permatex Dr. Bond Plastic Bonder 2 Part Kit, Part 1

Ingredients with multiple cas numbers

Name	CAS No
methyl methacrylate homopolymer	103220-63-9, 105417-82-1, 106008-78-0, 106440-59-9, 110617-09-9, 113041-33-1, 113096-36-9, 114512-63-9, 114558-18-8, 115165-76-9, 115190-04-0, 115252-35-2, 116189-91-4, 122525-41-1, 123897-62-1, 124181-99-3, 128151-87-1, 128417-83-4, 130123-99-8, 131463-02-0, 131831-56-6, 138185-30-5, 138186-02-4, 143476-91-9, 144747-15-9, 146909-33-3, 148092-40-4, 155123-40-3, 155421-39-9, 157090-38-5, 158319-04-1, 160170-94-5, 161755-86-8, 170905-97-2, 171040-50-9, 171970-80-2, 176366-03-3, 179530-26-8, 183131-10-4, 189021-27-0, 191551-10-7, 192464-91-8, 195009-31-5, 196623-67-3, 198292-76-1, 201948-33-6, 202289-62-1, 203526-74-3, 203665-52-5, 205599-74-2, 210823-97-5, 212624-68-5, 220286-91-9, 245346-80-9, 281223-34-5, 288264-32-4, 292865-40-8, 292865-41-9, 39379-18-5, 9011-14-7
silica amorphous, fumed, crystalline free	112945-52-5, 67256-35-3

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.

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