

## ITW AAMTech

## Chemwatch: 5070-19

#### Version No: 3.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 08/09/2014 Print Date: 22/09/2015 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 Super Glue Class 1 Type II	
Synonyms	PX49550	
Other means of identification	Not Available	

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

Relevant identified uses

A rapidly curing cyanoacrylate - based adhesive.

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

COMBUSTIBLE LIQUID, regulated for storage purposes only

Poisons Schedule	Not Applicable		
	R36/37/38	Irritating to eyes, respiratory system and skin.	
Risk Phrases <sup>[1]</sup>	R42/43	May cause SENSITISATION by inhalation and skin contact.	
RISK Phrases	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 <sup>[1]</sup>	Flammable Liquid Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Respiratory 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		

## Label elements

GHS label elements
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DANGER

## Hazard statement(s)

SIGNAL WORD

nazaru 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.

#### Label elements



Relevant risk statements are found in section 2

Indication(s) of

danger O, Xn

#### SAFETY ADVICE

Keep out of reach of children.
Keep away from combustible material.
Do not breathe gas/fumes/vapour/spray.
In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
This material and its container must be disposed of in a safe way.
Wear suitable gloves.
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	<b>S56</b> Dispose of this material and its container at hazardous or special waste collection point.	
<b>S64</b> If swallowed, rinse mouth with water (only if the person is conscious).		

## Other hazards

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

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

## Substances

See section below for composition of Mixtures

#### Mixtures

CAS No	%[weight]	Name			
7085-85-0	90-100	ethyl cyanoacrylate			
9011-14-7	1-10	methyl methacrylate homopolymer			
123-31-9	0.1-0.5	hydroquinone			

#### **SECTION 4 FIRST AID MEASURES**

## Description of first aid measures

Description of first ai	d measures
Eye Contact	<ul> <li>Eyelid Adhesion <ul> <li>Wash thoroughly with water and apply moist pad; maintain in position.</li> <li>DO NOT force separation.</li> <li>Transport to hospital, or doctor without delay.</li> <li>Minor eye contamination should be treated by copious washing with water or 1% sodium carbonate solution.</li> <li>The eye will generally open without further action, typically in one to two days. there should be no residual damage.</li> <li>Adhesive introduced</li> <li>Removal of contact lenses after eye injury should only be undertaken by skilled personnel.</li> </ul> </li> <li>Adhesive will attach itself to eye proteins and will disassociate from these over intermittent periods, usually within several hours.</li> <li>This will result in weeping until clearance of the protein complex.</li> <li>It is important to understand that disassociation will normally occur within a matter of hours even with gross contamination.</li> </ul>
Skin Contact	<ul> <li>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.</li> <li>Skin Contact: <ul> <li>Remove excessive adhesive.</li> <li>Soak in warm water - the adhesive should loosen from the skin in several hours. Dried adhesive does not present a health hazard.</li> <li>Contact with clothes, fabric, rags or tissues may generate heat, and strong irritating odours; skin burns may also ensue.</li> </ul> </li> <li>Skin Adhesion: <ul> <li>IMMEDIATELY immerse affected areas in warm soapy water.</li> <li>DO NOT force bonded surfaces apart.</li> <li>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.</li> <li>Remove any cured material with warm, soapy water.</li> <li>Seek medical attention without delay.</li> <li>A solvent such as acetone may be used (with care!) to separate bonded skin surfaces. NEVER use solvent near eyes, mouth, cuts, or abrasions.</li> </ul> </li> </ul>
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor, without delay.</li> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> </ul>

	<ul> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>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.</li> <li>Transport to hospital, or doctor.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> <li>For material bonded in the mouth seek medical/dental attention.</li> <li>If lips are accidentally stuck together apply lots of warm water and encourage maximum wetting and pressure from saliva inside the mouth.</li> <li>Peal or roll lips apart.</li> <li>Do NOT attempt to pull the lips with direct opposing action.</li> <li>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.</li> </ul>

## 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**

	▶ Water spray or fog.
	► Alcohol stable foam.
	► Dry chemical powder.
	▶ Carbon dioxide.
pecial hazards arisi	ng from the substrate or mixture
pecial hazards arisi	
pecial hazards arisi Fire Incompatibility	ng from the substrate or mixture  Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire Fighting	<ul> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> </ul>				
Fire/Explosion Hazard	<ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> </ul>				

## SECTION 6 ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Minor Spills	<ul> <li>If cloth has been used to wipe up spills, immediately soak the cloth in water to produce polymerisation and prevent possibility of autoignition.</li> <li>Remove all ignition sources.</li> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> </ul>
Major Spills	<ul> <li>Moderate hazard.</li> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> </ul>
	Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

	DO NOT allow clothing wet with material to stay in contact with skin
Safe handling	Avoid all personal contact, including inhalation.

	<ul> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>No smoking, naked lights or ignition sources.</li> <li>Store in a cool, dry, well-ventilated area.</li> </ul>

## Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	<ul> <li>For cyanoacrylates:</li> <li>Avoid contact with acids, bases, amines.</li> <li>Avoid contact with clothes, fabric, rags (especially cotton and wool) rubber or paper; contact may cause polymerisation.</li> <li>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.</li> </ul>

## 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/m3	Not Available	Not Available	Not Available

#### EMERGENCY LIMITS

Material name	TEEL-2	TEEL-3	
Polymethylmethacrylate; (Lucite)	0.47 mg/m3	5.2 mg/m3	31 mg/m3
Hydroquinone	20 mg/m3	32 mg/m3	
Original IDLH Revised IDLH			
Not Available	Not Available		
Not Available	Not Available		
Unknown mg/m3 / Unknown ppm	50 mg/m3		
	Polymethylmethacrylate; (Lucite) Hydroquinone Original IDLH Not Available Not Available	Polymethylmethacrylate; (Lucite)     0.47 mg/m3       Hydroquinone     1.8 mg/m3       Original IDLH       Not Available	Polymethylmethacrylate; (Lucite)       0.47 mg/m3       5.2 mg/m3         Hydroquinone       1.8 mg/m3       20 mg/m3         Original IDLH         Not Available       Not Available         Not Available       Not Available

## 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	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.</li> </ul>
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>NOTE:</li> <li>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.</li> </ul>

	Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
Body protection	See Other protection below
Other protection	<ul> <li>▶ Overalls.</li> <li>▶ P.V.C. apron.</li> <li>▶ Barrier cream.</li> </ul>
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 Super Glue Class 1 Type II

Material	СРІ
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
PVC	С

\* CPI - Chemwatch Performance Index

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.

#### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

#### Clear liquid with a sharp odour; not miscible with water. Reacts rapidly with water generating heat and with the proteins of Appearance human skin. **Relative density** 1.05-1.16 **Physical state** Liquid (Water = 1) Partition coefficient Not Available Not Available Odour n-octanol / water Auto-ignition **Odour threshold** Not Available Not Available temperature (°C) Decomposition Not Applicable Not Available pH (as supplied) temperature Melting point / Not Available Viscosity (cSt) Not Available freezing point (°C) Initial boiling point Molecular weight >149 Not Applicable and boiling range (°C) (a/mol) 85 (TCC) Not Available Flash point (°C) Taste Not Available Not Available **Evaporation rate Explosive properties** Combustible Not Available Flammability **Oxidising properties Upper Explosive Limit** Surface Tension Not Available Not Available (dyn/cm or mN/m) (%) Lower Explosive Limit Volatile Component <2 (VOC - by wt) Not Available (%vol) (%) Vapour pressure (kPa) < 0.027 Not Available Gas group

#### **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)

A: Best Selection

Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	3 арргох.	VOC g/L	Not Available

## SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

Inhaled	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.		
Skin Contact	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Small n-alkyl cyanoacrylates cause burns and irritation on skin contact. Exposure to their vapours can cause irritation, but usually only in dry conditions. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.		
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.		
	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.		
Chronic	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc	a sensitisation reaction in some persons compared to the general	
Chronic Permatex Super Glue	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc	a sensitisation reaction in some persons compared to the general	
	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure.	a sensitisation reaction in some persons compared to the general	
Permatex Super Glue	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure.	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION	
Permatex Super Glue	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION Not Available	
Permatex Super Glue Class 1 Type II	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY	a sensitisation reaction in some persons compared to the general ocur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION	
Permatex Super Glue Class 1 Type II ethyl cyanoacrylate	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: 233.2 mg/kg* <sup>[2]</sup>	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION [Manufacturer]	
Permatex Super Glue Class 1 Type II	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: 233.2 mg/kg* <sup>[2]</sup> Oral (rat) LD50: 190.8 mg/kg*] <sup>[2]</sup>	a sensitisation reaction in some persons compared to the general ccur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION [Manufacturer] Nil reported	
Permatex Super Glue Class 1 Type II ethyl cyanoacrylate methyl methacrylate	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: 233.2 mg/kg* <sup>[2]</sup> Oral (rat) LD50: 190.8 mg/kg*] <sup>[2]</sup>	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION [Manufacturer] Nil reported IRRITATION	
Permatex Super Glue Class 1 Type II ethyl cyanoacrylate methyl methacrylate	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: 233.2 mg/kg* <sup>[2]</sup> Oral (rat) LD50: 190.8 mg/kg*] <sup>[2]</sup> TOXICITY Not Available	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION [Manufacturer] Nil reported IRRITATION Not Available	
Permatex Super Glue Class 1 Type II ethyl cyanoacrylate methyl methacrylate homopolymer	Skin contact with the material is more likely to cause population. Substance accumulation, in the human body, may oc occupational exposure. TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: 233.2 mg/kg* <sup>[2]</sup> Oral (rat) LD50: 190.8 mg/kg* <sup>[2]</sup> TOXICITY Not Available TOXICITY Not Available	a sensitisation reaction in some persons compared to the general cur and may cause some concern following repeated or long-term IRRITATION Not Available IRRITATION [Manufacturer] Nil reported IRRITATION Not Available IRRITATION Not Available IRRITATION	

	Unless otherwise specified data extracted from R	TECS - Register of Toxic Eff	ect of chemical Substances
ETHYL CYANOACRYLATE	* [AIHAAP]		
Permatex Super Glue Class 1 Type II & HYDROQUINONE	The following information refers to contact aller Contact allergies quickly manifest themselves pathogenesis of contact eczema involves a ce allergic skin reactions, e.g. contact urticaria, in	as contact eczema, more ra II-mediated (T lymphocytes)	rely as urticaria or Quincke's oedema. The immune reaction of the delayed type. Other
ETHYL CYANOACRYLATE & METHYL METHACRYLATE	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.		
HOMOPOLYMER	of moderate to severe bronchial hyperreactivity	on methacholine challenge	e testing and the lack of minimal lymphocytic
HOMOPOLYMER Acute Toxicity	of moderate to severe bronchial hyperreactivity	on methacholine challenge	e testing and the lack of minimal lymphocytic
	of moderate to severe bronchial hyperreactivit inflammation, without eosinophilia, have also b	/ on methacholine challenge een included in the criteria fo	e testing and the lack of minimal lymphocytic or diagnosis of RADS.
Acute Toxicity Skin	of moderate to severe bronchial hyperreactivity inflammation, without eosinophilia, have also b	y on methacholine challenge een included in the criteria fo Carcinogenicity	e testing and the lack of minimal lymphocytic or diagnosis of RADS.
Acute Toxicity Skin Irritation/Corrosion Serious Eye	of moderate to severe bronchial hyperreactivity inflammation, without eosinophilia, have also b	y on methacholine challenge een included in the criteria fo Carcinogenicity Reproductivity STOT - Single	e testing and the lack of minimal lymphocytic or diagnosis of RADS.

Legend:

Data required to make classification available
 Data available but does not fill the criteria for classification

#### **SECTION 12 ECOLOGICAL INFORMATION**

#### Toxicity

Harmful to aquatic organisms.

Substances containing unsaturated carbons are ubiquitous in indoor environments. They result from many sources (see below). Most are reactive with environmental ozone and many produce stable products which are thought to adversely affect human health. The potential for surfaces in an enclosed space to facilitate reactions should be considered.

#### 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
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)

S − Data Not Available to make classification

## Waste treatment methods

	<ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> </ul>
	▶ Return to supplier for reuse/ recycling if possible.
Product / Packaging	Otherwise:
disposal	▶ 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

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

COMBUSTIBLE LIQUID	COMBUSTIBLE LIQUID, regulated for storage purposes only
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

#### **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

#### 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 (ethyl cyanoacrylate; hydroquinone; methyl methacrylate homopolymer)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	N (methyl methacrylate homopolymer)
Japan - ENCS	Υ
Korea - KECI	Y
New Zealand - NZIoC	Υ
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
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

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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