

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Supplier Name</b>	Armstrong World Industries (Australia) Pty. Ltd.
<b>Address</b>	29-39 Mills Road Braeside Vic 3195.
<b>Telephone</b>	(03) 9586 5500
<b>Facsimile</b>	(03) 9580 4810
<b>Emergency</b>	(03) 9586 5500
<b>Synonym(s)</b>	Armstrong PU-100 Solvent Free Two Part Polyurethane Adhesive Part A Resin
<b>Use(s)</b>	Bonding vinyl floor-coverings
<b>MSDS Date</b>	1 <sup>st</sup> October 2008

## 2. HAZARDS IDENTIFICATION

- Not classified as Hazardous According to NOHSC Criteria
- Not Classified as Dangerous Goods by the ADG Code
- Irritating to eyes, skin and respiratory system
- May cause sensitisation by skin contact

<b>Description</b>	Part A Polyurethane Polymer/Resin
<b>UN No</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Subsidiary Risk(s)</b>	None Allocated
<b>Poisons</b>	6
<b>Packaging Group</b>	None Allocated
<b>EPG</b>	None Allocated
<b>CAS No</b>	None Allocated

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

<b>Ingredient</b>	<b>Formula</b>	<b>CAS No</b>	<b>Weight %</b>
<b>Polyurethane Polymer</b>	Not Available	Not Available	30 - <60%
<b>Filler</b>	Not Available	Not Available	30 - <60%
<b>Tin – Organic Compound</b>	Not Available	Not Available	<0.3%
<b>Pigment</b>	Not Available	Not Available	0.25 - 1%

#### 4. FIRST AID MEASURES

<b>Eye</b>	<ul style="list-style-type: none"><li>▪ Immediately hold eyes open and flush continuously for at least 15 minutes with fresh running water.</li><li>▪ Ensure irrigation under eyelids by occasionally lifting upper &amp; lower eyelid.</li><li>▪ Transport to doctor or hospital without delay.</li></ul>
<b>Skin</b>	<ul style="list-style-type: none"><li>▪ Immediately flush skin with plenty of water (warm &amp; soapy if available) for at least 15 minutes while removing contaminated clothing and shoes.</li></ul>
<b>Inhaled</b>	<ul style="list-style-type: none"><li>▪ If affected, remove to fresh air. If not breathing apply resuscitation. Transport to doctor or hospital without delay.</li></ul>
<b>Ingestion</b>	<ul style="list-style-type: none"><li>▪ If conscious give water to drink do not induce vomiting unless directed by doctor. Call a doctor immediately.</li></ul>
<b>Advice to Doctor</b>	<ul style="list-style-type: none"><li>▪ Treat Symptomatically &amp; contact the poisons information centre on 131 126</li></ul>

#### 5. FIRE FIGHTING MEASURES

<b>Flash Point</b>	<ul style="list-style-type: none"><li>▪ Not Applicable</li></ul>
<b>Auto-ignition Temperature</b>	<ul style="list-style-type: none"><li>▪ Not determined</li></ul>
<b>Lower Explosive Limit</b>	<ul style="list-style-type: none"><li>▪ Not determined</li></ul>
<b>Upper Explosive Limit</b>	<ul style="list-style-type: none"><li>▪ Not determined</li></ul>
<b>Suitable Extinguishing Media</b>	<ul style="list-style-type: none"><li>▪ Carbon dioxide, dry chemical powder, water spray or fog.</li></ul>
<b>Hazards from Combustion</b>	<ul style="list-style-type: none"><li>▪ Use of water spray may cause water contamination and will generate carbon dioxide which is a fire hazard in closed containers or confined spaces.</li><li>▪ Heating may cause expansion or decomposition leading to explosion of container.</li></ul>
<b>Protective Precautions &amp; Equipment for Fire Fighters</b>	<ul style="list-style-type: none"><li>▪ Wear full body protective clothing with breathing apparatus.</li><li>▪ Use water delivered as fine spray to control fire and cool adjacent area.</li><li>▪ Avoid spraying water onto pools of liquid.</li><li>▪ Do not approach container suspected to be hot.</li><li>▪ Cool fire exposed containers with water spray from a protected location.</li><li>▪ If safe to do so, remove container from path of fire.</li></ul>
<b>Hazchem Code</b>	None Allocated

#### 6. ACCIDENTAL RELEASE MEASURES

- Evacuate personnel
- Wear full body protective clothing with self contained breathing apparatus
- Take all steps necessary to prevent spillage from entering drains or waterways
- Keep away from, and close off all sources of ignition
- Increase ventilation
- Contain and absorb spill with sand, earth, inert material or vermiculite

- Collect solid residues and seal in drums for disposal. Wash spill area with detergent and water
- Do not use water or neutralising agent indiscriminately on large spills
- Do not seal or stopper drums but allow to stand outdoors for 48 hours with bung removed
- Dispose of waste and empty containers in accordance with federal state and local laws

## 7. STORAGE AND HANDLING

<b>STORAGE</b>	<ul style="list-style-type: none"> <li>▪ Store in a cool, dry well ventilated area away from foodstuffs</li> <li>▪ Keep only in original container</li> </ul>
<b>HANDLING</b>	<ul style="list-style-type: none"> <li>▪ Wear gloves, overalls and eye protection</li> <li>▪ Do not eat, drink or smoke in the workplace</li> <li>▪ If ventilation is inadequate, wear suitable respiratory protection.</li> </ul>

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<b>Respiratory Protection</b>	<ul style="list-style-type: none"> <li>▪ When exposed to vapours or mists, a respiratory protection program meeting Australian and New Zealand Standards AS/NZS-1715 requirements must be followed whenever workplace conditions warrant use of a respirator.</li> <li>▪ Use organic vapour cartridge. None required if airborne concentrations are maintained below the exposure limit listed in the <i>Exposure Limit Information</i>.</li> </ul>
<b>Eye and Hand Protection</b>	<ul style="list-style-type: none"> <li>▪ Avoid contact with skin and eyes.</li> <li>▪ Wear chemical splash goggles (AS/NZS-1337) and or approved equivalent. Eye protection worn must be compatible with respiratory system employed.</li> <li>▪ Wear chemical resistant gloves and footwear.</li> <li>▪ Always work in well ventilated areas.</li> </ul>
<b>Flammability</b>	<ul style="list-style-type: none"> <li>▪ Non-flammable – product residue following evaporation of liquid content will burn in the presence of an ignition source.</li> </ul>
<b>Engineering Controls (Ventilation)</b>	<ul style="list-style-type: none"> <li>▪ Adequate ventilation should be provided in work area. A local exhaust ventilation system may be required to maintain exposure levels below exposure limit concentrations. Refer to Australian Standard AS-1668.</li> </ul>

## 9. PHYSICAL DESCRIPTION/ PROPERTIES

<b>Appearance</b>	Grey Paste
<b>Boiling Point</b>	> 200° C
<b>Vapour Pressure</b>	Not Available
<b>Specific Gravity</b>	Approximately 1.45
<b>Flash Point</b>	>100°C
<b>Flammable Limits</b>	Not Available
<b>Vapour Density (air = 1)</b>	Not Available
<b>Solubility in Water</b>	Insoluble

## 10. STABILITY AND REACTIVITY

### Hazardous Reactions

- Material reacts with strong oxidisers, alcohols, strong alkalis and metal salts/ compounds.

## 11. TOXICOLOGICAL INFORMATION

### Skin

- Prolonged or repeated exposure may cause skin irritation and in cases lead to dermatitis

### Eye

- May cause slight eye irritation. Corneal injury is unlikely

### Respiratory

- At room temperature, vapours are minimal due to low vapour pressure, although certain operations may generate vapour or aerosol concentrations sufficient to cause adverse effects

### Swallowed

- Material considered to be harmful if swallowed

## 12. ECOLOGICAL INFORMATION

### Eco-toxicological Effect

- Material may be hazardous to the environment
- Do not discharge to drain or water ways

## 13. DISPOSAL CONSIDERATIONS

- Dispose of empty containers in accordance with federal, state and local laws.

## 14. TRANSPORT INFORMATION

- Classified as 6.1(b) Harmful Substance according to the Australian Code for Transport of Dangerous Goods By Road and Rail (Edition 6, Section 1).

## 15. REGULATORY INFORMATION

- The material is labelled in accordance with State Poisons Regulations.

## 16. OTHER INFORMATION

- The advice and information contained herein is based on the original raw materials supplier's information. We believe the information to be accurate and reliable as at the date supplied, but no representation, guarantee or warranty, expressed or implied, is made to the accuracy, reliability, or completeness of the advice and information.
- We urge persons receiving this advice and information to make their own determination as to the advice and information suitability and the completeness for their own particular situation.



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<b>Facsimile</b>	(03) 9580 4810
<b>Emergency</b>	(03) 9586 5500
<b>Synonym(s)</b>	Part B Hardener
<b>Use(s)</b>	Component B Hardener for Armstrong PU-100 Solvent Free Two Part Polyurethane Adhesive.
<b>MSDS Date</b>	1 October 2008

## 2. HAZARDS IDENTIFICATION

- Classified as Hazardous According to NOHSC Criteria
- Not Classified as Dangerous Goods by the ADG Code
- Irritating to eyes, skin and respiratory system
- May cause sensitisation by skin contact

<b>Description</b>	Part B Polymeric MDI
<b>UN No</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>GT EPG</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Subsidiary Risk(s)</b>	None Allocated
<b>SPEC EPG</b>	None Allocated
<b>Packaging Group</b>	None Allocated
<b>SUSDP</b>	5
<b>CAS No</b>	None Allocated

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

<b>Ingredient</b>	<b>Formula</b>	<b>CAS No</b>	<b>Weight %</b>
<b>Diphenylmethane</b>	Not Available	9016-87	>99%
<b>Diisocyanate (isomers &amp; homologues)</b>	Not Available	9	<10%

#### 4. FIRST AID MEASURES

<b>Eye</b>	Hold eyes open, flush eyes with large amounts of water for at least 15 minutes. Seek medical advice.
<b>Skin</b>	Wash with plenty of soap and water. Remove contaminated clothing and launder before re-use. Seek medical advice if irritation develops or persists.
<b>Inhaled</b>	If affected, remove to fresh air. If breathing is difficult give oxygen and consult a doctor.
<b>Ingestion</b>	Call a doctor immediately. Do not induce vomiting unless directed by doctor.
<b>Doctor Information</b>	Treat Symptomatically and contact the poisons information centre on 131 126

#### 5. FIRE FIGHTING MEASURES

<b>Flash Point</b>	Not Applicable
<b>Auto-ignition Temperature</b>	Not determined
<b>Lower Explosive Limit</b>	Not determined
<b>Upper Explosive Limit</b>	Not determined
<b>Suitable Extinguishing Media</b>	Carbon Dioxide (CO <sup>2</sup> ), dry powder or protein based foam.
<b>Hazards from Combustion</b>	Combustion may emit toxic fumes including oxides of carbon and nitrogen.
<b>Protective Precautions &amp; Equipment for Fire Fighters</b>	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
<b>Hazchem Code</b>	None Allocated

#### 6. ACCIDENTAL RELEASE MEASURES

- If ventilation is inadequate, wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Do not allow into drains or waterways.
- Keep away from sources of ignition.
- Take up with absorbent material.
- Depose of waste and empty containers in accordance with federal state and local laws.

## 7. STORAGE AND HANDLING

<b>STORAGE</b>	<ul style="list-style-type: none"> <li>Store in a cool, dry well ventilated area below 30°C</li> <li>Keep only in original container</li> </ul>
<b>HANDLING</b>	<ul style="list-style-type: none"> <li>Wear gloves, overalls and eye protection</li> <li>Do not eat, drink or smoke in the workplace</li> <li>If ventilation is inadequate, wear suitable respiratory protection.</li> </ul>

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Limit Information	NOHSC			
	TWA	TWA	STEL	STEL
Component	(ppm)	(mg/m <sup>3</sup> )	(ppm)	(Mg/ m <sup>3</sup> )
Isocyanates	-	0.02	-	0.07

<b>a</b>	=	Not Listed
<b>TWA</b>	=	Time Weighted Average
<b>STEL</b>	=	Short time Exposure Limit

<b>Respiratory Protection</b>	<p>In case of vapours or mists, a respiratory protection program meeting Australian and New Zealand Standards AS/NZS-1715 requirements must be followed whenever workplace conditions warrant use of a respirator.</p> <p>Use organic vapour cartridge. None required if airborne concentrations are maintained below the exposure limit listed in the <i>Exposure Limit Information</i>.</p>
<b>Eye Protection</b>	Use chemical splash goggles (Australian and New Zealand Standards AS/NZS-1337) or approved equivalent. Eye protection worn must be compatible with respiratory system employed.
<b>Hand Protection</b>	Chemical resistant gloves; Protective clothing as necessary to prevent skin contact.
<b>Engineering Controls (Ventilation)</b>	Use local exhaust ventilation sufficient to maintain exposure levels below exposure limit concentrations. Refer to Australian Standard AS-1668.

## 9. PHYSICAL DESCRIPTION/ PROPERTIES

<b>Appearance</b>	Amber
<b>Boiling Point</b>	> 200° C (Decomposes)
<b>Vapour Pressure</b>	Less than 0.00001 mmHg (20 <sup>0</sup> )

<b>Flammable Limits LEL</b>	Not Applicable
<b>Flash Point</b>	>200°C (DIN 51758)
<b>State</b>	Viscous liquid
<b>Flammable Limits UEL</b>	Not Applicable
<b>Odour Characteristic</b>	Slightly musty
<b>Melting Point</b>	Not Applicable
<b>Vapour Density (air = 1)</b>	8.5
<b>Viscosity</b>	70mPa (25 <sup>0</sup> C)
<b>Density</b>	1.2 (25 <sup>0</sup> C)
<b>Flammability</b>	C2 Combustible Liquid – According to AS1940 Storage & Handling of Flammable and Combustible Liquids.
<b>Ignition Temperature</b>	Auto Ignition Temperature >400 <sup>0</sup> C
<b>Freezing Point</b>	Forms crystals below 10 <sup>0</sup> C

## 10. STABILITY AND REACTIVITY

<b>Hazardous Reactions</b>	<ul style="list-style-type: none"> <li>▪ Material reacts with caustic soda, ammonia, water, alcohols, primary and secondary amines and acids generating heat.</li> <li>▪ If container is contaminated with any substances, <b><u>DO NOT</u></b> re-seal container because pressure build-up may occur.</li> </ul>
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## 11. TOXICOLOGICAL INFORMATION

<b>Skin Irritation</b>	<ul style="list-style-type: none"> <li>▪ Irritating</li> </ul>
<b>Eye Irritation</b>	<ul style="list-style-type: none"> <li>▪ Irritating</li> </ul>
<b>Respiratory Irritation</b>	<ul style="list-style-type: none"> <li>▪ May be irritating</li> </ul>
<b>Sensitisation</b>	<ul style="list-style-type: none"> <li>▪ Material may cause sensitisation by skin contact in some susceptible people.</li> </ul>

## 12. ECOLOGICAL INFORMATION

<b>Eco-toxicological Effect</b>	<ul style="list-style-type: none"> <li>▪ Expected to be harmful to aquatic life</li> </ul>
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### **13. DISPOSAL CONSIDERATIONS**

- Dispose of empty containers in accordance with federal, state and local laws.

### **14. TRANSPORT INFORMATION**

- Classified as Dangerous Goods according to the Australian Code for Transport of Dangerous Goods By Road and Rail (Edition 6, Section 1).

### **15. REGULATORY INFORMATION**

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- We urge persons receiving this advice and information to make their own determination as to the advice and information suitability and the completeness for their own particular situation.