



# Material Safety Data Sheet

Page: 1 of 5

Infosafe No. ACRE5 Issue Date : May 2003 ISSUED by HILTI

Product Name : **HILTI CA 273 MEDIUM SETTING ADHESIVE PASTE, PART B**

Classified as hazardous according to criteria of NOHSC

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

**Product Name** HILTI CA 273 MEDIUM SETTING ADHESIVE PASTE, PART B  
**Product Use** Curing agent for epoxy resins.  
**Company Name** HILTI(AUST.) PTY LTD  
**Address** 23 Egerton Street, Silverwater 2128  
**Telephone Number/Fax** Tel: (02) 8748-1000 Fax: (02) 8748-1190

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	Other ingredients determined not to be hazardous		Balance
	Trimethyhexamethylenediamine	25620-58-0	>= 10 - < 30%
	Phenol	108-95-2	< 10%

**Other Information** Chemical nature: Formulated polyaminoamide.  
All ingredients are registered/known to NICNAS.

## 3. HAZARDS IDENTIFICATION

Harmful in contact with skin and if swallowed.  
Causes burns.  
May cause sensitisation by skin contact.

## 4. FIRST AID MEASURES

**Inhalation** Move to fresh air. Call a physician immediately.  
**Ingestion** Do NOT induce vomiting. Contact a Poisons Information Centre (Phone 131 126) or a doctor at once.  
**Skin** Wash off with soap and plenty of water. Do NOT use solvents or thinners. If skin irritation persists, call a physician.  
**Eye** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention.  
**First Aid Facilities** Eye wash station, safety shower and normal washroom facilities.  
**Advice to Doctor** No specific antidote. Treat symptomatically.  
**Other Information** Poisons Information Centre (Phone 131 126) can provide further advice.

## 5. FIRE FIGHTING MEASURES

**Extinguishing Media** Water spray.  
Dry powder.  
Carbon dioxide (CO<sub>2</sub>).  
Foam.

**Specific Hazards** Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purposes of storage and handling, in accordance with the requirements of AS1940. This product should be stored and used in a well ventilated area away from naked flames, sparks and other sources of ignition.

**Hazardous Combustion Products** Burning produces obnoxious and toxic fumes.  
Carbon oxides.

**Decomposition Temp.** > 200°C

**Unsuitable Extinguishing Media** High volume water jet.



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**Protective Equipment** Wear self-contained breathing apparatus and protective suit.

## 6. ACCIDENTAL RELEASE MEASURES

**Spills & Disposal** Soak up with inert, non-combustible absorbent material (e.g. sand, silica gel, acid binder, universal binder). Sweep up and shovel into suitable containers for disposal.

**Personal Precautions** Keep away from sources of ignition - No smoking.  
Avoid contact with skin, eyes and clothing.  
Wear suitable protective clothing.  
Ensure adequate ventilation.  
Do not breathe vapours/dust.

**Environmental Precautions** Do not allow material to contaminate ground water system. Prevent product from entering drains.

## 7. HANDLING AND STORAGE

**Handling** Provide sufficient air exchange and/or exhaust in work rooms. Handle and open container with care. Ensure adequate ventilation.

**Storage** Store in a cool, dry, well ventilated area away from sources of ignition. This product should be stored away from food, drink, animal feeding stuffs and incompatible materials. Keep container tightly closed. For information on the design of the store-room reference should be made to Australian Standards AS1940: The storage and handling of flammable and combustible liquids, and AS 4326: The storage and handling of oxidizing agents. Reference should also be made to any relevant Commonwealth, State or Territory regulations.

**Storage Temperatures** Keep at temperatures between 10 and 30°C.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Phenol			4	1	
<b>Other Exposure Information</b>	<p>The National Occupational Health And Safety Commission (NOHSC) has assigned the abbreviation Sk to product component Phenol in it's exposure standards. This indicates that absorption through the skin may be a significant source of exposure. Care should be taken to avoid contact with the skin.</p> <p>TWA - the Time-Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge these concentrations should neither impair the health of, nor cause undue discomfort to, nearly all workers. These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. Exposure Standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.</p>					
<b>Respiratory Protection</b>	<p>If risk of inhalation exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices.</p>					
<b>Eye Protection</b>	<p>Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.</p>					
<b>Hand Protection</b>	<p>Avoid contact with skin by wearing long impervious gloves (rubber, neoprene, PVC complying with AS 2161). Apply barrier creams to exposed skin areas. Barrier cream should only be applied before work with product begins.</p>					



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Page: 3 of 5

Infosafe No. ACRE5 Issue Date : May 2003 ISSUED by HILTI

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<b>Body Protection</b>	Long sleeved clothing. Safety boots.
<b>Eng. Controls</b>	Ensure adequate ventilation, especially in confined spaces. Wherever possible the workplace must be ventilated sufficiently to ensure that exposure standards are met. If exposure standards are exceeded appropriate breathing protection will be required. Ensure airflow where this product is being used is directed away from the operators. If cured material made from this product is to be cut or sanded, ensure that dust is kept below the NOHSC Exposure Standard for inspirable dusts (10 mg/m <sup>3</sup> ) or the ACGIH Exposure Standard for respirable dusts (3 mg/m <sup>3</sup> ).
<b>Hygiene Measures</b>	Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Black paste with a mild ammoniacal odour.
<b>Decomposition Temperature</b>	> 200°C
<b>Boiling Point</b>	> 200°C
<b>Solubility in Water</b>	Practically insoluble @ 20°C
<b>pH Value</b>	Not available
<b>Vapour Pressure</b>	Approx. < 20 Pa @ 20°C.
<b>Density</b>	1.45 - 1.50 g/cm <sup>3</sup> @ 25°C
<b>Flash Point</b>	> 140°C. Method: DIN 51758 (Pensky-Martens Closed Cup).
<b>Flammable Limits LEL</b>	Not available
<b>Flammable Limits UEL</b>	Not available
<b>Other Information</b>	Miscibility with water: immiscible.

## 10. STABILITY AND REACTIVITY

<b>Materials to Avoid</b>	Strong acids and strong bases. Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbon oxides. Nitrogen oxides. Burning produces obnoxious and toxic fumes. Product will not decompose explosively.
<b>Hazardous Reaction</b>	Product as received will not present a dust explosion hazard. If cured material made using this product is to be machined or sanded, a dust explosion hazard may be created. All dust generated should be removed as quickly as possible, preferably by the use of a vacuum cleaner.
<b>Other Information</b>	Take necessary action to avoid static electricity discharge.

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicology Information</b>	LD50 (Oral, rat) > 1480 mg/kg.
<b>Inhalation</b>	Inhalation of vapours or mists may cause severe irritation to the respiratory system.
<b>Ingestion</b>	Harmful if swallowed. Ingestion may cause nausea, vomiting, diarrhea, abdominal pain and chemical burns to the mouth, throat and stomach.
<b>Skin</b>	Harmful in contact with skin. Skin contact will cause redness, itchiness, irritation and chemical burns with resultant tissue destruction. May be absorbed through the skin with resultant toxic effects.



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Page: 4 of 5

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<b>Eye</b>	Eye contact will cause stinging, blurring, tearing and possible permanent corneal damage.
<b>Chronic Effects</b>	This product is a skin sensitiser. Repeated or prolonged skin contact may result in allergic contact dermatitis.
<b>Eye Irritation</b>	Corrosive - rabbit.
<b>Skin Irritation</b>	Corrosive - rabbit (dermal).
<b>Skin Sensitisation</b>	Causes sensitisation - guinea pig (dermal).

## 12. ECOLOGICAL INFORMATION

<b>Environ. Protection</b>	Avoid subsoil penetration. Prevent product from entering drains. Do not contaminate surface water.
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## 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal</b>	Spilt/waste material should be disposed of by incineration by an approved agent according to local regulations.
<b>Container Disposal</b>	Empty containers should either be sent to an approved agent for cleaning and recycling or incineration according to local regulations.

## 14. TRANSPORT INFORMATION

This material is a Class 8 Corrosive Substance according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Class 8 - Corrosive Substances are incompatible in a placard load with any of the following:

- Class 1, Explosives,
- Class 4.3, Dangerous When Wet Substances,
- Class 5.1, Oxidising Agents & Class 5.2 - Organic Peroxides,
- Class 6, Toxic Substances (where the Toxic substances are cyanides and the corrosives are acids),
- Class 7, Radioactive Substances,
- Class 8, Corrosive Substances (concentrated strong acid is to be segregated from strong alkali), and are incompatible with food and food packaging in any quantity.

<b>U.N. Number</b>	2735
<b>Proper Shipping Name</b>	AMINES, LIQUID, CORROSIVE, N.O.S. - (Contains Trimethyhexamethylenediamine)
<b>DG Class</b>	8
<b>Hazchem Code</b>	3X
<b>Packaging Method</b>	5.9.8
<b>Packing Group</b>	III
<b>EPG Number</b>	8A1
<b>IERG Number</b>	36

## 15. REGULATORY INFORMATION

<b>Risk Phrase</b>	R21/22 Harmful in contact with skin and if swallowed. R34 Causes burns. R43 May cause sensitization by skin contact. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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Page: 5 of 5

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**Safety Phrase** S2 Keep out of reach of children.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 After contact with skin, wash immediately with plenty of soap and water.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S45 In case of accident or if you feel unwell seek medical advice immediately  
S61 Avoid release to the environment. Refer to special instructions/safety data sheet.

**Poisons Schedule** S5

**Hazard Category** Harmful, Corrosive, Dangerous for the environment

## 16. OTHER INFORMATION

**Contact Person/Point** For further information call Hilti (Aust) Pty. Ltd. on: (02) 8748 1000 (Business Hours).  
...End Of MSDS...