

# SAFETY DATA SHEET

Product: Epigen 405 "B" Page 1 of 3 Date of Issue: January 2012

Hazardous according to criteria of Worksafe Australia

## 1 PRODUCT & COMPANY UNDERTAKING IDENTIFICATION

Product Name: EPIGEN 405 "B"  
Major Recommended Use: Resin binder when mixed with "A".  
Company: Peerless Industrial Systems Pty Ltd  
ABN: 14 097 615 391  
Address: PO Box 407 Cloverdale WA 6985 AUSTRALIA  
Telephone Number: 61 (08) 9477 3788  
Fax Number: 61 (08) 9477 3766  
Email: service@peerlessindustrialsystems.com

## 2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion	Classification	
Isophoronediamine	2855-13-2	<15%	R21/22 R43	R34 R52/53
Methylenedi(cyclohexylamine)	1761-71-3	<15%	R22 R37	R35 R43
Ingredients determined not to be hazardous		to 100%		
Description	Cycloaliphatic Amines			

## 3 HAZARDS IDENTIFICATION

May cause sensitization by skin contact (R43). Irritating to respiratory system (R37). Causes severe burns (R35). Harmful in contact with skin and if swallowed (R21/22).

**SUSDP:** 5

**ADG CLASS:** 8 , packaging group III

**Signs and Symptoms of Exposure (Acute effects):**

**Swallowed:** Ingestion may cause: headache, nausea, vomiting, bleeding of the gastrointestinal tract, or vomiting of blood.

**Eye:** Contact with eyes can cause severe irritation and pain, and vapour may cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Burns of the eye may cause severe irritation, pain or blindness.

**Skin:** Contact with skin can cause irritation, redness and discomfort and may cause burns. Prolonged and repeated contact may result in skin sensitisation.

**Inhaled:** Risk of exposure to hazardous concentrations of vapour is unlikely.

**Chronic:** Repeated and/or prolonged exposures may result in: adverse skin effects (defatting, rash or allergic reaction/sensitisation), adverse eye effects (conjunctivitis or corneal damage).

## 4 FIRST AID MEASURES

**Swallowed:** Administer 3-4 glasses of milk or water and seek medical advice immediately.

**Eye:** Immediately flush with plenty of water for at least 15 minutes. Retract eyelids often. Seek medical advice.

**Skin:** Remove any contaminated clothing and product. Wash skin thoroughly with mild soap/water. Flush affected areas with water for 15 minutes. Seek medical advice if ill effect or irritation develops.

**Inhaled:** Move patient to fresh air. Give oxygen or artificial respiration if breathing has stopped or is laboured. Seek medical advice.

**First Aid Facilities:** Product is supplied and used as a 2 part polymer system designed to cure to a hard solid.

Exposure to either part may not be able to be determined with any surety, and data on health effects during cure are not available. It is therefore suggested that the exposure be assumed to be to mixed, curing product, and appropriate consideration be given to seeking immediate medical advice.

**Advice to Doctor:** As per "First Aid Facilities", doubt may exist as to whether the particular substance requiring treatment is "A" or "B", or if it is a mixture undergoing cure to a hard plastic. The health hazard information relates to the greatest known risk. Remove stomach contents by gastric suction or induce vomiting as appropriate. Ingredients may be corrosive to some body tissues, therefore secondary treatment considerations will be required.

## 5 FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Ignition will give rise to a Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO<sub>2</sub>), dry chemical, dry sand or limestone.

**Special Exposure Hazards (fire fighting):** May generate toxic, irritating or flammable combustion products. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. May generate ammonia gas. Personnel in vicinity and downwind should be evacuated.

**Special Fire Fighting Procedures:** Firefighters should wear butyl rubber boots, gloves, and body suit and a self contained breathing apparatus.

## 6 ACCIDENTAL RELEASE MEASURES

**Precautions:** Wear protective clothing, boots, gloves, and eye protection.

**Methods for Cleaning Up:** If recovery is not feasible, admix with dry soil, sand or non reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with vacuum truck.

## 7 HANDLING &amp; STORAGE

**Handling:** Avoid contact with skin or eyes. When handling, do not eat, drink, or smoke. Avoid using in any spray application without strict conformance to all applicable electrical codes and the ventilation regulations.

**Storage:** Keep away from acids, oxidisers. Keep in cool, dry ventilated storage and in closed containers.

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Standards:** Not established

**Engineering Controls:** Conventional airflow is generally considered to be acceptable. In confined areas, exhaust fans should be utilised in accordance with good working practices.

**Hand Protection:** Neoprene rubber, Impermeable gloves, Cuffed butyl rubber, Nitrile rubber, or PVC gloves are suitable.

**Eye Protection:** Splash proof eye goggles.

**Skin Protection:** Long sleeved clothing.

**Flammability:** Non flammable

## 9 PHYSICAL &amp; CHEMICAL PROPERTIES

Appearance:	Thick liquid
Smell:	Ammoniacal
pH:	Alkaline
Boiling Point (@760mm Hg):	> 220°C
Melting Point:	No data
Flashpoint (°C):	> 135°C Closed Cup
Flammability:	Not applicable
Ignition Temperature:	No data
Explosive Limits:	No data
Oxidising Properties:	No data
Vapour Pressure (mm Hg):	< 1 @ 20°C
Vapour Density:	No data
Solubility in Water:	<1%
Solubility in Ethanol:	Slight (0.1-1%)
Solubility in n-Octanol:	Complete other than solids (<5%)
Partition Coefficient n-Octanol/Water	No data
Specific Gravity:	0.9
Per cent Volatiles:	< 0.5%
Volatile Organic Compounds:	< 0.5%

## 10 STABILITY &amp; REACTIVITY

**Conditions to Avoid:** Not applicable.

**Incompatibility (Materials to Avoid):** Mineral acids, Organic acids, Oxidising agents, Reactive metals, Sodium or Calcium Hypochlorite.

**Hazardous Decomposition Products:** Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, and Nitric Acid in a fire. Ammonia when heated. Irritating and toxic fumes at elevated temperatures. Nitrogen Oxide can react with water vapours to form corrosive Nitric Acid.

**Hazardous Transformation Products:** Will not occur.

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#### 11 TOXICOLOGICAL INFORMATION

**Acute Oral Toxicity (LD50, rat):** No data.

**Acute Dermal Toxicity (LD50, rabbit):** No data.

**Acute Inhalation Toxicity (LC50, rat):** No data.

#### 12 ECOLOGICAL INFORMATION

**Ecotoxicity:** No data.

**Environmental Fate:** 2855-13-2 Isophoronediamine : biodegradable.

#### 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Wear protective clothing during disposal operations. If disposal by a waste contractor, make sure that he has sufficient information and that waste containers are properly labelled.

Where disposal of surplus stock is required, Cure as per use directions to enable possible disposal by conventional waste disposal techniques

#### 14 TRANSPORT INFORMATION

**ADR/RID Shipping Data:** 2735 Amines, liquid, corrosive, n.o.s.(4,4'-Methylenebis(cyclohexyl)amine & Isophoronediamine), 8

**IMO Shipping Data:** Refer to Bill of Lading.

**ICAO/IATA Shipping Data:** Amines, liquid, corrosive, n.o.s. (4,4'-Methylenebis(cyclohexyl)amine & Isophoronediamine) // 8 // UN2735 // III

#### 15 REGULATORY INFORMATION

**EEC Symbol:** Corrosive (C)

**EEC Council Directives relating to the classification, packaging and labelling of dangerous substances and preparations Risk (R) and Safety (S) phrases:** May cause sensitization by skin contact (R43). Irritating to respiratory system (R37). Causes severe burns (R35). Harmful in contact with skin and if swallowed (R21/22).

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26). Wear suitable protective clothing, gloves and eye/face protection (S36/37/39). In case of accident or if you feel unwell, seek medical advice immediately (S45).

#### 16 OTHER INFORMATION

This Safety Data Sheet has been written to comply with Directives 93/112/EEC and 88/379/EEC to comply with KEMI General Recommendations 1998:1

Intended Use: Curing Agent for Epoxy Resin

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