**SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**Chemical nature:** Blend of amines and other non hazardous ingredients.

**Trade Name:** EcoPoxy 106 Hardener

**Product Use:** Hardener component for two part epoxy coating.

**Creation Date:** September, 2016

**This version issued:** September, 2016 and is valid for 5 years from this date.

Poisons Information Centre: Phone 13 1126 from anywhere in Australia

**SUPPLIER CONTACT INFORMATION:**

- **Name:** Illawarra Coatings Pty. Ltd.
- **Address:** 19 Technology Drive, APPIN NSW 2560. PO Box 95, APPIN NSW 2560
- **Telephone:** 61.2.4631 2200
- **Facsimile:** 61.2.4631 2233
- **Website:** www.illawarracoatings.com
- **Email:** info@illawarracoatings.com
- **Emergency:** 0414 874 494 (24 hours, 7 days a week)

**SECTION 2 - HAZARDS IDENTIFICATION**

**Statement of Hazardous Nature**

This product is classified as: Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**Risk Phrases:** R38, R41, R43, R51/53. Irritating to skin. Risk of serious damage to eyes. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

**Safety Phrases:** S23, S28, S36, S45, S51, S61, S24/25, S36/37/39. Do not breathe vapours. After contact with skin, wash immediately with plenty of soap and water. Wear suitable protective clothing. In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre immediately (show this SDS where possible). Use only in well ventilated areas. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.

**SUSMP Classification:** S5

**ADG Classification:** None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**UN Number:** None allocated

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**GHS Signal word:** WARNING

**HAZARD STATEMENT:**

- H227: Combustible liquid.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H411: Toxic to aquatic life with long lasting effects.

**PREVENTION**

- P102: Keep out of reach of children.
- P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
- P261: Avoid breathing fumes, mists, vapours or spray.
- P262: Do not get in eyes, on skin, or on clothing.
P264: Wash contacted areas thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.

RESPONSE
P362: Take off contaminated clothing and wash before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313: If skin irritation or rash occurs: Get medical advice.
P337+P313: If eye irritation persists: Get medical advice.
P391: Collect spillage.
P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

STORAGE
P402+P404: Store in a dry place. Store in a closed container.
P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL
P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

EMERGENCY OVERVIEW

Physical Description & Colour: Grey homogeneous liquid.
Odour: Characteristic amine/ammonia odour.
Major Health Hazards: may cause serious damage to eyes, skin irritant, possible skin sensitiser.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc,%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C_{18}-unsaturated, dimers, reaction products with polyethylenepolyamines</td>
<td>68410-23-1</td>
<td>10-30</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Triethlenetetramine</td>
<td>112-24-3</td>
<td>&lt;2</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Polyamine</td>
<td>secret</td>
<td>&lt;2</td>
<td>not set</td>
<td>not set</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td>secret</td>
<td>to 100</td>
<td>not set</td>
<td>not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 - FIRST AID MEASURES

General Information:
You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.
**Ingestion**: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Fire and Explosion Hazards**: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media**: In case of fire, use carbon dioxide, dry chemical, foam, water fog.

**Fire Fighting**: If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point**: >61°C

**Upper Flammability Limit**: No data.

**Lower Flammability Limit**: No data.

**Autoignition temperature**: No data.

**Flammability Class**: Flammable Category 4 (GHS), C1 combustible (AS 1940)

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Accidental release**: In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include neoprene, butyl rubber. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned below (section 8). Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

**SECTION 7 - HANDLING AND STORAGE**

**Handling**: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under ”Storage” should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage**: Note that this product is GHS Flammable Class 4 and therefore, for Storage, meets the definition of Dangerous Goods. If you store large quantities (tonnes) of such products, we suggest that you consult your state’s Dangerous Goods authority in order to clarify your obligations regarding their storage.

Store packages of this product in a cool place. Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Keep containers of this product in a well ventilated area. Make sure that the product does not come into contact with substances listed under ”Incompatibilities” in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**

The following Australian Standards will provide general advice regarding safety clothing and equipment:


**SWA Exposure Limits**

<table>
<thead>
<tr>
<th>Exposure Limit</th>
<th>TWA (mg/m$^3$)</th>
<th>STEL (mg/m$^3$)</th>
</tr>
</thead>
</table>

Exposure limits have not been established by SWA for any of the significant ingredients in this product.
No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Protective glasses or goggles must be worn when this product is being used. Failure to protect your eyes may lead to severe harm to them or to general health. Emergency eye wash facilities must also be available in an area close to where this product is being used.

**Skin Protection:** If you believe you may have a sensitisation to this product or any of its declared ingredients, you should prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: neoprene, butyl rubber.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Description &amp; colour:</strong></td>
<td>Grey homogeneous liquid.</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>Characteristic amine/ammonia odour.</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>&gt;100°C at 100kPa</td>
</tr>
<tr>
<td><strong>Freezing/Melting Point:</strong></td>
<td>No specific data. Liquid at normal temperatures.</td>
</tr>
<tr>
<td><strong>Vapour Pressure:</strong></td>
<td>No data.</td>
</tr>
<tr>
<td><strong>Vapour Density:</strong></td>
<td>No data.</td>
</tr>
<tr>
<td><strong>Specific Gravity:</strong></td>
<td>1.10</td>
</tr>
<tr>
<td><strong>Water Solubility:</strong></td>
<td>Miscible</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>9.0-9.2 (as supplied)</td>
</tr>
<tr>
<td><strong>Volatility:</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>Odour Threshold:</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>Evaporation Rate:</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>Coeff Oil/water Distribution:</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>Approx 15000 cps (temperature not stated)</td>
</tr>
<tr>
<td><strong>Autoignition temp:</strong></td>
<td>No data</td>
</tr>
</tbody>
</table>

### SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C. Keep containers tightly closed. Containers should be kept dry. Keep containers and surrounding areas well ventilated.

**Incompatibilities:** acids, oxidising agents.

**Fire Decomposition:** Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** Polymerisation reactions are unlikely; they are not expected to occur.

### SECTION 11 - TOXICOLOGICAL INFORMATION

**Local Effects:**

**Target Organs:** There is no data to hand indicating any particular target organs.

Triethlenetetramine is Classed by SWA as a potential sensitiser by skin contact.

**POTENTIAL HEALTH EFFECTS**

Persons sensitised to Triethlenetetramine should avoid contact with this product.
Inhalation:
**Short Term Exposure:** Available data indicates that this product is not harmful. However, product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.
**Long Term Exposure:** No data for health effects associated with long term inhalation.

Skin Contact:
**Short Term Exposure:** Classified as a potential sensitiser by skin contact. Exposure to a skin sensitiser, once sensitisation has occurred, may manifest itself as skin rash or inflammation, and in some individuals this reaction can be severe. In addition, product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.
**Long Term Exposure:** No data for health effects associated with long term skin exposure.

Eye Contact:
**Short Term Exposure:** This product is a severe eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms such as swelling of eyelids and blurred vision may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment is likely to cause permanent damage.
**Long Term Exposure:** No data for health effects associated with long term eye exposure.

Ingestion:
**Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.
**Long Term Exposure:** No data for health effects associated with long term ingestion.

**Carcinogen Status:**
**SWA:** No significant ingredient is classified as carcinogenic by SWA.
**NTP:** No significant ingredient is classified as carcinogenic by NTP.
**IARC:** No significant ingredient is classified as carcinogenic by IARC.

## CLASSIFICATION OF HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethlenetetramine</td>
<td>&gt;=1%Conc&lt;5%: Xi; R43</td>
</tr>
</tbody>
</table>

### SECTION 12 - ECOLOGICAL INFORMATION

Toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment. This product is not readily biodegradable. However, likely to degrade slowly in the soil or water and not cause long term problems. This product is likely to accumulate in body tissues, especially fat.

### SECTION 13 - DISPOSAL CONSIDERATIONS

**Disposal:** This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. If neither of these options is suitable in-house, consider controlled incineration, or contact a specialist waste disposal company.

### SECTION 14 - TRANSPORT INFORMATION

**UN Number:** This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

### SECTION 15 - REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations.
The following ingredients: Triethlenetetramine, Polyamine (as amines), are mentioned in the SUSMP.

### SECTION 16 - OTHER INFORMATION
This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code  
Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)

AICS  
Australian Inventory of Chemical Substances

SWA  
Safe Work Australia, formerly ASCC and NOHSC

CAS number  
Chemical Abstracts Service Registry Number

Hazchem Code  
Emergency action code of numbers and letters that provide information to emergency services especially firefighters

IARC  
International Agency for Research on Cancer

NOS  
Not otherwise specified

NTP  
National Toxicology Program (USA)

R-Phrase  
Risk Phrase

SUSMP  
Standard for the Uniform Scheduling of Medicines & Poisons

UN Number  
United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS.

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)

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http://www.kilford.com.au/ Phone (02)9251 4532