1. IDENTIFICATION OF SUBSTANCE

Product Name: Solvent Base 2 Pack Epoxy Primer Base
Product Description: A solution of Xylene, n-butanol and liquid epoxy tar compound mixed with a Polyaminoamide resin hardener.
Supplier: As heading

2.1 CLASSIFICATION OF THE SUBSTANCES OR MIXTURE

EC 1272/2008
Physical and Chemical Hazards: Flam. Liq. 3 - H226
Human health: Acute Tox. 4 - H302
Environment: None

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health
This product may be harmful if swallowed.

Physical and Chemical Hazards
This product and it's vapours are flammable.

2.2 LABEL ELEMENTS
Contains Xylene, n-Butanol

Labels in Accordance with EC 1272/2008

Signal Word: Warning

Hazard Statements
H226: Flammable liquid and vapour.
H302: Harmful if swallowed.

Precautionary Statements
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310: IF SWALLOWED: Immediately call a doctor.
P331: Do NOT induce vomiting.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredient</th>
<th>EC/List No.</th>
<th>CAS No.</th>
<th>%</th>
<th>GHS Symbols</th>
<th>1272/2008</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>215-535-7</td>
<td>1330-20-7</td>
<td>60 - 90%</td>
<td>02, 07</td>
<td>H226, H312, H315, H332</td>
<td>Warning</td>
</tr>
<tr>
<td>n-Butanol</td>
<td>200-751-6</td>
<td>71-36-3</td>
<td>10 - 40%</td>
<td>02, 05, 07</td>
<td>H226, H302, H315, H318, H335, H336</td>
<td>Danger</td>
</tr>
</tbody>
</table>

Additional Information
The Full Text for all Hazard Statements are Displayed in Section 16. All Concentration values are expressed in a weight/weight % value.
4. FIRST AID MEASURES

Inhalation - Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin Contact - Remove contaminated clothing. Immediately flush skin with large amount of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

Eye Contact - Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.

Ingestion - If swallowed, do NOT induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Physician - Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal. Potential for cardiac sensitization, particularly in abuse situations. Hypoxia or negative inotropes may enhance these effects. Consider: oxygen therapy. Call a doctor or poison control centre for guidance.

Common Symptoms and effects both acute and delayed

Inhalation - No known symptoms.
Ingestion - Symptoms may include nausea and vomiting.
Skin Contact - Prolonged contact may cause irritation, redness, dry skin and dermatitis.
Eye Contact - Symptoms may include irritation or pain, lacrimation and redness of the eye tissue.

5. FIRE FIGHTING MEASURES

Fire Hazards - The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water. Carbon monoxide may be evolved if incomplete combustion occurs. Keep adjacent containers cool by spraying with water.

Extinguishing Media - Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a Jet.

Combustion Products - During fire, oxides of Carbon and Nitrogen may be formed.

Protective Equipment - Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Environmental Procedures - Keep run off water out of sewers and water sources. Dike for water control.

Procedures - Stay upwind, evacuate personnel, use suitable extinguishers. Move container from fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks occur due to fire. Use water spray to control vapours. If risk of water pollution occurs, notify appropriate authorities.

6. ACCIDENTAL RELEASE MEASURES

Personal - Use protective gloves, goggles, respirator and suitable protective clothing. Avoid contact with skin and eyes. Restrict access to authorised personnel. Stay upwind.

Environmental - Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low areas. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Ventilate contaminated area thoroughly.
6. ACCIDENTAL RELEASE MEASURES

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Vapour may form an explosive mixture with air. See Chapter 13 for information on disposal.

Methods of Clean Up: - Ventilate well, stop flow of gas or liquid if possible. Absorb in vermiculite, dry sand or earth and place in containers. Dispose of in accordance with local legislation.

7. HANDLING AND STORAGE

Handling: - Keep away from heat, sparks and open flames. Avoid breathing vapours. Good industrial practice in housekeeping and personal hygiene should be followed. When using do not eat, drink or smoke. Wear suitable gloves and eye/face protection and a BS2091 approved respirator. Equipment or utensils used for dispensing the chemical must be suitable for the purpose. Wash out after use. Wash thoroughly after handling the material. Remove contaminated clothing and wash before re-use. If spraying, or using in confined areas always wear airline breathing apparatus equipment conforming to BS 4275.

Storage: - Store in a dry well ventilated area in secure containers, clearly labelled and away from sources of ignition. Reseal open packages to prevent spillage. Use in a well ventilated area. Minimise dust generation and accumulation. Avoid contact with eyes, skin and clothing. Avoid ingestion/inhalation. Always keep the Hardener cans with the larger Base cans. Do not store with oxidising agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Adequate ventilation should be provided such that Derived No Effect Limits are not exceeded. Local Exhaust Ventilation is preferable to personal protection. Gloves made out of Butyl Rubber at least 0.5mm thick, goggles, protective overalls, a chemical respirator and chemically resistant safety shoes should also be worn.

Provide eyewash station and safety shower. Wear appropriate clothing to prevent repeated or prolonged skin contact.

All DNELs and PNECs listed below are for the substances listed at full concentration and not as present in Polybond Epoxy Coal Tar.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Workers (Systemic)</th>
<th>General (Systemic)</th>
<th>Workers (Local)</th>
<th>General (Local)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inhalation</td>
<td>Dermal</td>
<td>Oral</td>
<td>Inhalation</td>
</tr>
<tr>
<td></td>
<td>Acute Chronic</td>
<td>Acute Chronic</td>
<td>Acute Chronic</td>
<td>Acute Chronic</td>
</tr>
<tr>
<td>Xylene</td>
<td>289</td>
<td>77</td>
<td>-</td>
<td>174</td>
</tr>
<tr>
<td>n-butanol</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3.125</td>
</tr>
<tr>
<td>Xylene</td>
<td>289</td>
<td>-</td>
<td>180</td>
<td>174</td>
</tr>
<tr>
<td>n-butanol</td>
<td>-</td>
<td>310</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Chronic = Long Term Exposure
Inhalation (mg/m³) Oral (mg/kg bw/day) Dermal (mg/kg bw/day)

Information provided by echa

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Freshwater</th>
<th>Marine Water</th>
<th>Intermittent Release</th>
<th>STP</th>
<th>Sediment Freshwater</th>
<th>Sediment Marine Water</th>
<th>Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>0.327 mg/l</td>
<td>0.327 mg/l</td>
<td>0.327 mg/l</td>
<td>6.58 mg/l</td>
<td>12.46 mg/kg</td>
<td>12.46 mg/kg</td>
<td>2.31 mg/kg</td>
</tr>
<tr>
<td>n-butanol</td>
<td>0.082 mg/l</td>
<td>0.0082 mg/l</td>
<td>2.25 mg/l</td>
<td>2476 mg/l</td>
<td>0.178 mg/kg</td>
<td>0.0178 mg/kg</td>
<td>0.015 mg/kg</td>
</tr>
</tbody>
</table>

Hygiene Measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet. Remove any clothing that becomes wet or contaminated. Contaminated clothing should be placed in a closed container until disposal or decontamination. Warn cleaning personnel of contaminants hazardous properties.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Black Liquid</th>
<th>Vapour Density</th>
<th>No Data Available</th>
<th>Boiling Point</th>
<th>Flashpoint</th>
<th>Melting Point</th>
<th>Autoignitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Sweet Solvent / Tar</td>
<td>approx. 0.9 g/cm³@ STP</td>
<td>150°C</td>
<td>26°C Abel</td>
<td>400°C</td>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY
- Avoid heat, sparks, open flames and other ignition sources.
- Strong Oxidising Agents, Strong Acids.
- Does not decompose under normal conditions. When ignited, produces oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION
- General: None.
- Skin Contact: Prolonged or repeated contact causes irritation and may lead to dermatitis.
- Eye Contact: May cause irritation to eyes.
- Inhalation: May cause irritation to the respiratory tract and coughing.
- Ingestion: May cause nausea and vomiting. Ingesting large quantities may lead to kidney failure.

Toxilogical information on ingredients

<table>
<thead>
<tr>
<th>Ingredient / Subject</th>
<th>Xylene</th>
<th>n-Butanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity (Oral LD50)</td>
<td>3523 mg/kg (Rat)</td>
<td>2.83 ml/kg (Rat)</td>
</tr>
<tr>
<td>Acute Toxicity (Dermal LD50)</td>
<td>&gt; 4200 mg/kg (Rabbit)</td>
<td>4.24 ml/kg (Rabbit)</td>
</tr>
<tr>
<td>Acute Toxicity (Inhalation LC50)</td>
<td>&gt; 6700 ppm (Rat)</td>
<td>&gt; 17.76 mg/l (Rat)</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION
Polybond Hammered Finish is not considered to be dangerous to the environment or toxic to fish.

Ecological information on ingredients (Acute Toxicity)

<table>
<thead>
<tr>
<th>Ingredient / Subject</th>
<th>Species</th>
<th>Medium</th>
<th>Period</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>fish</td>
<td>Oncorhynchus mykiss (Rainbow Trout)</td>
<td>fresh water</td>
<td>96h</td>
<td>LC50</td>
</tr>
<tr>
<td></td>
<td>invertebrates</td>
<td>Daphnia magna</td>
<td>fresh water</td>
<td>24h</td>
<td>IC50</td>
</tr>
<tr>
<td></td>
<td>algae</td>
<td>Pseudokirchnerella subcapitata</td>
<td>fresh water</td>
<td>73h</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>microorganisms</td>
<td>Nitrosononas sp.</td>
<td>fresh water</td>
<td>24h</td>
<td>EC50</td>
</tr>
<tr>
<td>n-Butanol</td>
<td>fish</td>
<td>Pimephales promelas</td>
<td>fresh water</td>
<td>96h</td>
<td>LC50</td>
</tr>
<tr>
<td></td>
<td>invertebrates</td>
<td>Daphnia magna</td>
<td>fresh water</td>
<td>48h</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>algae</td>
<td>Pseudokirchnerella subcapitata</td>
<td>fresh water</td>
<td>96h</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>microorganisms</td>
<td>Pseudomonas putida</td>
<td>fresh water</td>
<td>17h</td>
<td>EC50</td>
</tr>
</tbody>
</table>

Persistence and degradability
There is no data on the degradability of this product.

Bioaccumulative potential
There are no data on the bioaccumulation of this product.

Mobility in soil
There are no data on the Mobility in soil of this product.

PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.
13. DISPOSAL CONSIDERATIONS

Hazardous Waste. Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Contact waste disposal services.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN Number</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Name</td>
<td>Tars</td>
</tr>
<tr>
<td>Transport Class (ADR/RID/ADN)</td>
<td>Class 3: Flammable</td>
</tr>
<tr>
<td>Transport Class (IMDG)</td>
<td>3.3</td>
</tr>
<tr>
<td>Packing Group (ADR)</td>
<td>III</td>
</tr>
<tr>
<td>Packing Group (RID/ADN)</td>
<td>III</td>
</tr>
<tr>
<td>Packing Group (IMDG)</td>
<td>III</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

Statutory Instruments
Control of Substances Hazardous to Health.

Approved Code Of Practice
Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes
Workplace Exposure Limits EH40.

EU Legislation

National Regulations

16. OTHER INFORMATION

Abbreviations:
N/A: not applicable. ND: not determined. NR: not regulated.
ADR: European agreement concerning the international carriage of Dangerous goods by road.
CAS: International reference numbers for chemical substances. (Chemical Abstracts Service)
CHIP: Chemicals (Hazard Information and Packaging) Regulations 1993, and later revisions.
DNEL: Derived No-Effect Level.
EINECS: European Inventory of Existing commercial Chemical Substances.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
HSE EH40: H.S.E. Guidance note EH40 on Occupational Exposure Limits (revised annually), to be used in conjunction with the COSHH regulations.
LC50: Lethal Concentration, 50 percent. LD50: Lethal Dose, 50 percent.
EC50: Concentration of toxant that provides a response that is half way between a baseline and maximum effect.
IC50: Concentration that is half way between a baseline and completely inhibiting a biological function.
LL50: Similar to LC 50 but tests the water phase from incompletely miscible materials.
EL50: Similar to EC 50 but tests the water phase from incompletely miscible materials.
PBT: Persistent Bioaccumulative Toxic. PNEC: Predicted No-Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure Limit.
STP: Standard Temperature and Pressure, in a standard environment (298°K / 25°C and 1 atm pressure)
TWA: Time Weighted Average.
vPvB: Very Persistent and Very Bioaccumulative.
WEL: Workplace Exposure Limit.
16. OTHER INFORMATION

Example Label using information from Section 2.2

Epoxy Coal Tar

Contains: Xylene n-Butanol

Flammable liquid and vapour.
Harmful if swallowed.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
Keep container tightly closed.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a doctor.
Do NOT induce vomiting.

WARNING
Batch Number: 0123456
5 Litres

Polybond Ltd. Unit 6 William Street, Northam, Southampton, Hampshire SO14 5QH
Telephone: 02380 988350 Fax: 02380 988355 Email: sales@polybond.co.uk

Hazard Statements From Section 2.1 and 3 in Full

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Note: This data sheet does not constitute a user’s assessment of workplace risk as required by the Health & Safety At Work Act, COSHH, Management of Health and Safety at Work Regulations or other health and safety legislation.

The data contained in this safety data sheet has been supplied as required by the Chemicals (Hazard identification and Packaging for supply) Regulations, as amended, for the purpose of protecting the health and safety of industrial users who are deemed capable of understanding and acting upon the information provided. Every endeavour has been made to ensure that the information in this document is reliable, but no responsibility can be taken for errors or omissions. Users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.