

Version 1.2

REVISON DATE: 1/07/07

PRINT DATE: 1/07/07

MATERIAL SAFETY DATA SHEET

MSDS 621 PAGE 1 OF 7

1. Product and Company Identification

1.1 PRODUCT NAME: POLYROOF

1.2 USE OF PRODUCT Sealant.

1.3 SUPPLIER: Equus Industries Ltd

Sheffield Street

Riverlands Industrial Estate

Blenheim, Marlborough, New Zealand

Telephone: +64 3 578 0214 Fax: +64 3 578 0919

1.4 EMERGENCY CONTACT: National Poison Centre

Telephone: 0800 764 766

Information about Safety Data Sheet: Telephone: +64 3 578 0214 8:00am - 6:00pm Mon - Fri

2. Hazards Identification

2.1 Classification:

Dangerous Goods – classification according to New Zealand Dangerous Goods Code.

2.2 Risk & Safety Phrases:

R20,21,36,37,38,43,45 S2,24,25,36,37,38,39,45

The full text of each R & S phrases is listed in Section 16.

3. Composition/Information on Ingredients

3.1 Chemical Characterization (Preparation):

This product is a preparation.



3.2 Hazardous Ingredients:

CAS NO.	COMPONENT	CONCENTRATION %	CLASSIFICATION
1330-20-7	Xylene	15-40%	R10/20/21/38
100-41-4	Ethylbenzene	5.0-10.0%	R11/20/36/37/38
8007-45-2	Coal Tar	5.0-10.0%	R36/37/38/45
64741-81-7	Petroleum distillates	5.0-10.0%	R36/37/38/45

3.3 Only ingredients, additives and impurities which are classified and contribute to the classification of the product are included in this section.

4. First Aid Measures

Get medical attention for any significant over exposure.

4.1 After Inhalation:

Remove person to fresh air. Avoid further over exposure. If symptoms persist seek medical attention.

4.2 After Skin Contact:

Wash area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, seek medical attention immediately.

4.3 After Eye Contact:

Flush immediately with copious amounts or running water, while holding the eyelids open for at least 15 minutes or until irritation subsides. Seek medical attention immediately.

4.4 After Ingestion:

Get medical attention immediately. Do not induce vomiting unless advised by a doctor.

4.5 Advice to Doctor:

Treat symptomatically.

5. Fire Fighting Measures

5.1 Suitable Extinguishing Media:

If water fog is ineffective, use carbon dioxide, dry chemical or foam.

5.2 Protective Equipment:

Use accepted fire fighting techniques. Wear full fire fighting protective clothing, including self contained breathing apparatus (SCBA).

5.3 Specific Hazards:

Product may ignite if heated in excess of its flash point. Vapours may travel to sources of ignition and flashback. Vapour concentrations in enclosed areas may ignite explosively. Empty containers may contain ignitable vapours.



5.4 Combustion Products:

Smoke and fumes. Carbon monoxide, carbon dioxide, and oxides of sulphur can form.

6. Accidental Release Measures

6.1 Preliminary Action and Precautions:

- **6.1.1** Eliminate every possible source of ignition.
- **6.1.2** Ventilate area immediately.
- **6.1.3** Wear recommended personal protective equipment to avoid inhalation of vapours and contact with skin, eyes and clothing.
- **6.1.4** Prevent entry of product into sewers, storm water drains and open bodies of water.
- **6.1.5** Scrape up the spillage into suitable disposal containers and allow to cure before disposal.

7. Handling and Storage

7.1 Handling:

- **7.1.1** Prevent inhalation of vapour, ingestion and contact with skin, eyes and clothing.
- **7.1.2** Wear personal protective equipment.
- **7.1.3** Provide good ventilation.
- **7.1.4** Use appropriate respiratory equipment if using in confined spaces.
- **7.1.5** Seal packaging when not in use.
- **7.1.6** Clean hands thoroughly after handling.
- **7.1.7** Do not eat, or drink while using the product.
- **7.1.8** Do not weld, smoke, generate sparks, or use flame near the work area.
- **7.1.9** Avoid contact with oxidizing agents.

7.2 Storage:

- **7.2.1** Store under dry warehouse conditions.
- **7.2.2** Store away from sources of ignition, (i.e. sparks, open flames, heat etc.)
- **7.2.3** Store away from oxidizing agents.
- **7.2.4** Keep packaging dry at all times.



8. Exposure Controls and Personal Protection Equipment

8.1 Exposure Limits:

Xylene Cas – 1330-20-7 TLV/TWA (ACGIH): 100ppm (435mg/m³)

STEL (ACGIH): 150pp (650mg/m³)

Ethylbenzene Cas – 100-41-4 TLV/TWA (ACGIH): 100ppm (435mg/m³)

STEL (ACGIH): 125ppm (540mg/m³)

8.2 Exposure Controls:

8.2.1 Exposure Controls in the Work Place:

Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

8.2.2 Personal Protection Equipment

Respiratory Protection – Wear appropriate, properly fitted NIOSH/MSHA approved organic

vapour or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the

MSDS. Follow manufacturers directions for respirator use.

Hand Protection – Use suitable impervious nitrile or neoprene gloves and protective

apparel to reduce exposure.

Eye Protection – Wear appropriate eye protection. Wear chemical safety goggles

and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or

materials.

Personal Protective Measures - Use professional judgment in the selection, care and use. Inspect

and replace equipment at regular intervals. Have eye washing

facilities readily available.

9. Physical and Chemical Properties

9.1 General Information:

Paste Physical State/Form Colour Black Odour Aromatic рН Not available **Vapour Pressure** Not available Vapour Density Heavier than air Melting Point/Range Not available **Freezing Point** Not available 371°C **Boiling Point/Range**

Flash Point Not available
Water Solubility Negligible
Evapouration Rate Not available

Specific Gravity 0.98 % Volatile Weight 30%

Lower Explosion LimitNot availableUpper Explosion LimitNot availableAutoignition TemperatureNot available



VOC 300 g/l

10. Stability and Reaction

10.1 General Information:

This material is stable when properly handled and stored. No hazardous reactions are known.

10.2 Conditions to Avoid:

Welding arcs, flames or other high temperature sources.

10.3 Material to Avoid:

Oxidizing agents.

10.4 Hazardous Decomposition Products:

None expected when material properly handled and stored. Thermal decomposition see section 5.

11. Toxicological Information

11.1 Emergency Overview:

May cause nausea, headaches and dizziness. May cause drowsiness, weakness and fatigue. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further over exposure. If symptoms persist, seek medical attention.

11.2 Acute toxicity:

Ethylbenzene:

Oral LD 50: (Rat) 3,500 mg/kg Dermal LD50: (Rabbit) 17,800 mg/kg

Xylene:

Oral LD 50: (Rat) 3,523 - 8,600 mg/kg

Inhalation LC 50: (Rat) 6,350 mg/l

11.3 Skin Contact:

May cause moderate irritation. May cause itching, reddening, inflammation. May cause a rash. May cause sensitization.

11.4 Eye Contact:

Direct contact may cause moderate irritation. Direct contact may cause temporary redness and discomfort.

11.5 Ingestion:

May cause gastrointestinal irritation, nausea, and vomiting.

11.6 Inhalation:

May cause nausea, headaches and dizziness. May cause drowsiness, weakness and fatigue. May cause slight irritation to the respiratory system.



11.7 Chronic effects:

Prolonged or repeated skin contact with asphalt may result in skin sensitivity, such as irritation, rashes and dermatitis. Prolonged or repeated exposure to polycyclic aromatic hydrocarbons and other volatiles which are contained in trace amounts in asphalt have been shown to cause cancer or respiratory damage in animals. Prolonged or repeated exposure to xylene may cause defatting, drying and irritation of the skin, dermatitis,, central nervous system (CNS(effects, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney damage. Xylene over exposure may affect fetal development. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Prolonged or repeated skin contact with thermally cracked petroleum distillates in these products may result in irritation and dermatitis. Although a direct association between thermally cracked petroleum distillates and cancer or other lung disease has not been established in man, thermally cracked petroleum distillates may contain variable amounts of polynuclear aromatic hydrocarbons and other volatiles which have been shown to cause cancer and respiratory damage in animals. May produce a phototoxic reaction when contaminated skin is exposed to sunlight. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

11.7.1 Aggravated Medical Conditions:

Pre existing eye, skin, liver, kidney and respiratory disorders may be aggravated by exposure.

12. Ecological Information

12.1 Environment Protection:

Prevent product from entering drains, sewers and waterways.

12.2 Ecotoxicity:

Data not available.

12.3 Persistence and degradability:

Data not available.

12.4 Bioaccumulative Potential:

Data not available.

13. Disposal Consideration

13.1 Material

Dispose of according to regulations by incineration in a special waste incinerator or landfill at a permitted facility in accordance with local/national regulations.

14. Transport Information

14.1 Land Transport:



Road: Not regulated (not dangerous for transport)

Rail: Not regulated (not dangerous for transport)

14.2 Sea Transport: Not regulated (not dangerous for transport)

14.3 Air Transport: Not regulated (not dangerous for transport)

14.4 Postal and Courier Service: Can be transported under normal conditions.

15. Regulatory Information

This product is hazardous.

16. Other Information

16.1 Full Text of R-Phrases Contained in Section 2:

R20/21 Harmful by inhalation and in contact with skin.
R36/37/38 Irritating to the eyes, respiratory system and skin

R43 May cause sensitization by skin contact

R45 May cause cancer

16.2 Full Text of S-Phrases Contained in Section 2:

S2 Keep out of the reach of children S24/25 Avoid contact with skin and eyes

\$36/37/39 Wear suitable protective clothing, gloves and eye/face protection
 \$38 In case of insufficient ventilation, wear suitable respiratory equipment

S45 In case of accident or if you feel unwell, seek medical advice immediately (show

label where possible)

16.3 The information contained in this Data Sheet relates only to the specific material identified. Equus Industries Ltd believes the information to be accurate and reliable as at the date of this Data Sheet. No Warranty, Guarantee or representation is expressed or implied by the Company as to the absolute correctness or completeness of any representation contained in this Data and assumes no legal responsibility in connection therewith. It can not be assumed that all acceptable safety measures are contained in this Data Sheet, or that additional measures may not be required under particular or exceptional circumstances or conditions.