

**SAFETY DATA SHEET****1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE****Product Name:** RHINO ARMAFLOOR 500 AU Part B (ISO)

Synonyms:

**Uses:** Hardener or Part B of a 2 pack urethane coating system**Suppliers Name:** Polymer Group Ltd  
62 Stonedon Drive, East Tamaki  
Manukau City, New Zealand  
0064 9 274-1400**Emergency Number:** Ph: 0800 999 001 Mon-Friday 8.00 am – 5.30 pm  
Ph: 09 916 3026 24 hrs**2. HAZARDS IDENTIFICATION****Statement of Hazardous Nature:** Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.**HSNO Classification:** 3.1D, 6.1D, 6.1D(inhalation), 6.1E(dermal), 6.1E(oral) 6.3B, 6.5A, 6.5B, 6.5B(contact)**HSNO Approval Number:** HSR002640**Hazard and Precautionary Statements:****Hazard:**

Combustible liquid

Harmful if inhaled

May be harmful in contact with skin

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

**Prevention:**

Read label before use

Read Safety Data Sheet before use

Keep away from heat, sparks, open flames, hot surfaces. No smoking.

Avoid breathing dust, mist, vapours, spray, fume, gas

Use only outdoors or in a well-ventilated area.

Wear protective gloves, eye and face protection.

**Response:**

If medical advice is needed, have product container or label at hand.

**If on Skin** – Wash with plenty of soap and water

If skin irritation or rash occurs, get medical advice/attention

Use a cleansing agent on skin

Wash contaminated clothing before reuse

**If inhaled** – If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing.

If experiencing respiratory symptoms, Call a Poison centre or doctor/physician.  
 Call a Poisons Centre or doctor/physician if you feel unwell.  
 Do NOT induce vomiting.

**In Case of Fire:** Use Foam, Dry chemical powder, BCF (Where regulations permit), Carbon dioxide.

**Storage:** Store in a cool, dry, well-ventilated area.

**Disposal:**

Recycle wherever possible.

Bury residue in an authorised landfill.

Recycle containers if possible. If not possible, dispose of in an authorised landfill.

Containers may still present a chemical hazard/danger when empty.

If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, and then puncture containers, to prevent re-use, and bury at an authorised landfill.

Contact appropriate Waste Management Company for guidance and disposal options in your area. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection & waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material/runoff and contact with soil, waterways, drains & sewers.

Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:	Cas No:	%
Hexamethylene diisocyanate polymer	28182-81-2	>95
Hexamethylene diisocyanate	822-06-0	<0.2

### 4. FIRST AID MEASURES

#### EMERGENCY & FIRST AID PROCEDURES

**Eye Contact:** Wash immediately with fresh running water. Ensure complete irritation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact:** Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

**Inhalation:** If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.

Following uptake by inhalation, move person to an area free from risk of further exposure. Oxygen or artificial respiration should be administered as needed. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic. A physician should be consulted.

**Ingestion:** For advice contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and

prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

**Note to physician:** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide.

**Special Fire Fighting Procedures:** Wear full body protective clothing with breathing apparatus. Prevent by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area.

**Unusual Fire and Explosion Hazards:** Combustion products include: carbon dioxide, isocyanates and minor amounts of hydrogen cyanide, nitrogen oxides, other pyrolysis products typical of burning organic material. May emit corrosive fumes. When heated at high temperatures many isocyanates decompose rapidly generating a vapour which pressurises containers, possibly to the point of rupture. Release of toxic and/or flammable isocyanate vapours may then occur.

## 6. ACCIDENTAL RELEASE MEASURES

### SPILLS AND DISPOSAL

**Steps to be taken in case material is released or spilled:**

#### Minor Spills

Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

#### Major Spills

Evacuate area from everybody not dealing with the emergency, keep them upwind and prevent further access, remove ignition sources and if inside building ventilate area as well as possible. Notify supervision and others as necessary. Put on personal protective equipment (suitable respiratory protection, face and eye protection, protective suit, gloves and impermeable boots). Control source of leakage (where applicable). Avoid contamination with water, alkalies and detergent solutions. Material reacts with water and generates gas, pressurises containers with even drum rupture resulting. DO NOT reseal container if contamination is suspected. Open all containers with care.

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

**Waste Disposal Method:** Dispose of according to local authority requirements.

## 7. HANDLING AND STORAGE

### SPECIAL PRECAUTIONS AND STORAGE DATA

**Special Sensitivity (Heat, Light, Moisture):** Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated place.

### STORAGE AND TRANSPORT

## 8. EXPOSURE CONTRAS/PERSONAL PROTECTION

### EXPOSURE STANDARDS

**Threshold Limit Value – Time Weighted Average (TLV-TWA):**

Hexamethylene diisocyanate polymer 0.02 mg/m<sup>3</sup>

**Threshold Limit Value – Short Term Exposure Limit (TLV-STEL):**

Hexamethylene diisocyanate polymer 0.07 mg/m<sup>3</sup>

**Threshold Limit Value – Ceiling (TLV-C):** Not established

## ENGINEERING CONTROLS

**Ventilation:** All processes in which isocyanates are used should be enclosed wherever possible. Total enclosure, accompanied by good general ventilation, should be used to keep atmospheric concentrations below the relevant exposure standards. If total enclosure of the process is not feasible, local exhaust ventilation may be necessary. Local exhaust ventilation is essential where lower molecular weight isocyanates (such as TDI or HDI) is used or where isocyanate or polyurethane is sprayed.

## PERSONAL PROTECTION

**Skin and eye protection:** The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. Personal hygiene is a key element of effective hand care. Do NOT wear natural rubber (latex gloves). Isocyanate resistant materials include Teflon, Viton, nitrile rubber and some PVA gloves. Protective gloves and overalls should be worn as specified in the appropriate national standard. Contaminated garments should be removed promptly and should not be re-used until they have been decontaminated.

Note: natural rubber, neoprene, PVC can be affected by isocyanates.

Do NOT use skin cream unless necessary and then use only in minimum amount. Isocyanate vapour may be absorbed into skin cream and this increases hazard.

**Respiratory Protection:** Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Personal protective equipment must be appropriately selected, individually fitted and workers trained in their correct use and maintenance. Personal protective equipment must be regularly checked and maintained to ensure that the worker is being protected.

Air-line respirators or self-contained breathing apparatus complying with the appropriate national standard should be used during the clean-up of spills and the repair or clean-up of contaminated equipment and similar situations which cause emergency exposures to hazardous atmospheric concentrations of isocyanate.

## FLAMMABILITY

**Flammability Limits:** Not available

## 9. PHYSICAL/CHEMICAL PROPERTIES

<b>Appearance &amp; Odour:</b>	Straw coloured liquid with aromatic odour
<b>Boiling Point:</b>	Not available
<b>Vapour Pressure:</b>	Not available
<b>Specific Gravity:</b>	Not available
<b>Flash Point:</b>	>65°C
<b>% Volatile by Volume:</b>	Not available

**Flammability Limits:** Not available  
**Solubility in Water:** Immiscible

## 10. STABILITY AND REACTIVITY

### REACTIVITY DATA

**Stability:** Product is considered stable.

**Polymerisation:** Acids and bases initiate polymerisation reactions in these materials.

**Incompatibility (Materials to avoid):** Amines, strong bases, aldehydes, alcohols, alkali metals, ketones, strong oxidisers, hydrides, phenols and peroxides.

**Hazardous decomposition products:** Carbon dioxide, isocyanates.

## 11. TOXICOLOGICAL INFORMATION

### HEALTH EFFECTS

#### ACUTE:

**Skin and Eyes:** May cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

May produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness. Conjunctivitis may occur with prolonged exposure.

**Ingestion:** Accidental ingestion of the material may be damaging to the health of the individual. Ingestion may result in nausea, abdominal irritation, pain and vomiting.

**Inhaled:** Vapours, mists or fumes may be harmful. May cause respiratory irritation in some persons. The vapour/mist may be highly irritating to the upper respiratory tract and lungs.

#### CHRONIC

**Human Effects of Over Exposure:** Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates.

## 12. ECOLOGICAL INFORMATION

No data available.

## 13. DISPOSAL CONSIDERATIONS

### DISPOSAL STATEMENT

Recycle wherever possible.

Bury residue in an authorised landfill.

Recycle containers if possible. If not possible, dispose of in an authorised landfill.

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Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

#### 14. TRANSPORTATION INFORMATION

U.N. No: Not applicable      Haz Chem Code: Not applicable

Not regulated . Not dangerous according to transport regulations.

#### 15. REGULATORY INFORMATION

**HSNO Approval Number: HSR002640**

**HSNO Classification: 3.1D, 6.1D, 6.1D(inhalation), 6.1E(dermal), 6.1E(oral) 6.3B, 6.5A, 6.5B, 6.5B(contact)**

#### 16. OTHER INFORMATION

This document was reviewed and revised December 2018.

**Contact: POLYMER GROUP LTD – PHONE 09 274 1400**

**IMPORTANT NOTE:** Data quoted is typical for the product but does not constitute a specification and is based on the most accurate information available to PGL at the time of writing. All information contained herein is given in good faith but is subject to change without notice.