SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE

Product Name: RHINO ARMAFLOOR 500 AU PART A (Resin)

Synonyms: Not available

Uses: Part A of a polyurea/polyurethane coating

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: 6.3B, 6.5B, 6.5B(contact), 9.1C, 9.1D

HSNO Approval Number: HSR002644

Hazard and Precautionary Statements:

Hazard:

May cause an allergic skin reaction Causes mild skin irritation Harmful to aquatic life with long lasting effects

Prevention:

Read safety data sheet before use Avoid breathing dust, fume, gas, mist, vapours, spray Wear protective gloves/clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace Avoid release to the environment

Response:

If on Skin : Wash with plenty of soap and water If skin irritation or rash occurs, get medical advice/attention Wash contaminated clothing before reuse

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 reuse, 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:	<u>%</u>
Aspartic acid, N,N"-(methylenedicyclohexanedyl)bis-,ester	136210-30-5	>95
Diethyl fumarate	623-91-6	3

4. FIRST AID MEASURES

EMERGENCY & FIRST AID PROCEDURES

Eye Contact: Wash out immediately with water. If irritation continues, 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, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

Ingestion: 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, ie becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortable drink. Seek medical advice.

Note to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use 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: Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide.

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:

Moderate hazard:

Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

7. HANDLING AND STORAGE

SPECIAL PRECAUTIONS AND STORAGE DATA

Special Sensitivity (Heat, Light, Moisture): Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources.

STORAGE AND TRANSPORT

Storage Temperature (Min/Max): Store in a cool, dry, well-ventilated area.

8. EXPOSURE CONTRAS/PERSONAL PROTECTION

EXPOSURE STANDARDS

Threshold Limit Value – Time Weighted Average (TLV-TWA): Threshold Limit Value – Short Term Exposure Limit (TLV-STEL): Threshold Limit Value – Ceiling (TLV-C): Not established Not established Not established

ENGINEERING CONTROLS

Ventilation: Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

PERSONAL PROTECTION

Skin and eye protection: Safety glasses with side shields, chemical goggles, contact lenses may pose a special hazard.

Soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Wear chemical protective gloves, eg PVC. Wear safety footwear or safety gumboots eg rubber.

Respiratory Protection: When the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and class of filter, the nature of protection varies with type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-face Respirator	Powered Air Respirator
Up to 10 x ES	A-AUS P2	-	A-PAPR-AUS/Class 1 P2
Up to 50 x ES	-	A-AUS/Class 1 P2	-
Up to 100 x ES	-	A-2 P2	A-PAPR-2 PR (full face)

FLAMMABILITY

Flammability Limits: Not available.

9. PHYSICAL/CHEMICAL PROPERTIES

Appearance & Odour:	Colourless liquid with slight inherent odour, does not mix with water
Boiling Point:	100°C
Vapour Pressure:	0.3 @ 20°C
Specific Gravity:	Not available
Flash Point:	100°C
% Volatile by Volume:	Not available
Flammability Limits:	Not available
Solubility in Water:	Immiscible

10. STABILITY AND REACTIVITY

REACTIVITY DATA

Stability: Stable under normal storage conditions.

Polymerisation: Will not occur.

Incompatibility (Materials to avoid): Avoid reaction with oxidising agents.

Hazardous decomposition products: Carbon dioxide, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

HEALTH EFFECTS

ACUTE:

Skin and Eyes: There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material. Entry into the blood stream, through cuts, abrasions or lesions may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Although the liquid is not thought to be an irritant, direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Ingestion: Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (eg liver, kidney) damage is evident.

Inhaled: There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

CHRONIC

Human Effects of Over Exposure: Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

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.

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 reuse, and bury at 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: HSR002644

HSNO Classification: 6.3B, 6.5B, 6.5B(contact), 9.1C, 9.1D

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.