Technical Data Sheet

Rhino Linings®
PREMIUM PROTECTION

Rhino ArmaFloor® 500AU

A-SIDE - Resin **B-SIDE - ISO**

Revised Date: 17/07/2019
This TDS Replaces All Previous Versions

DESCRIPTION

ArmaFloor® 500AU – 10ltr & 40ltr kit is a two-component, rapid curing, hybrid polyurea (polyaspartic) coating system designed as a Decorative Finish yet durable coating for floors and other applications. Formulated with aliphatic chemistry, ArmaFloor® 500AU is both colourfast and UV stable allowing it take UV exposure without colour shifts seen with other coating systems such as epoxies. ArmaFloor® 500AU is a 1:1 mix ratio system with sufficient pot life to be rolled or brushed with common flooring application equipment.

FEATURES & BENEFITS

- Fast cure allowing rapid turnaround time; under normal conditions, light foot traffic within 3-5 hours, return to service within 24 hours (passenger car), full cure in 4 to 7 days.
- Achieve variety of colours, patterns, logos, using decorative flakes, particles, or signs.
- Excellent abrasion and impact resistance.
- Excellent chemical resistance.
- Excellent UV resistance and high gloss characteristics.
- Bonds to virtually all profiled substrates, including concrete, fibreglass, primed woods and primed metals.

TYPICAL USES

- Excellent durability and aesthetics for concrete floors, concrete bench tops and other similar coating locations including garage floors, laboratories, restaurants, airplane hangars, entry and lobby areas and warehouses
- Creates a durable, seamless lining which conforms to any shape and size.

NOT RECOMMENDED FOR

- Do not apply to concrete with curing or sealing membranes.
- Do not apply to substrates affected by moisture content in excess of 5%.
- Should not be used where surface temperatures consistently exceed 50ºC.
- Do not apply to concrete less than 28 days old.
- Do not apply to base concrete less than 10ºC or greater than 35ºC.
- Avoid applying in conditions with high humidity.
- **NOTE –** Substrate temperature **must** be 3ºC above the dew point prior to application.
- Low temperature & high humidity can cause amine bloom. Contact Rhino Linings Technical Department.
- Tyre staining may occur on the finished coating due to different tyre chemical compounds.

PHYSICAL PROPERTIES: (@25°C/50%RH)

Hardness		
Pencil	2H	
Pendulum	160	
Tensile Strength (psi)*	6,500	ASTM D-412
Elongation (%)*	6-8	ASTM D-412
Impact Resistance, lbs (kg)	100 (45.4)	
Taber Abrasion Resistance	50-60	ASTM D-4060
(mg of loss/1000 cycles) CS17 Wheel;	1000 grams weight	
Specific Gravity (grams/cc)	1.0	ASTM D-792
Water Absorption (%)	0.5	ASTM D-570
Water Vapour Transmission		ASTM E-96
Rate of Transmission, grains/h ft20	.58	

© 2025 Rhino Linings Australasia Pty Ltd. All rights reserved

Permeance (perm, in – lb)	1.39	
Solids Content	85%	
QUV Weatherometer, 4,000 hours		
Oxidation	No effect	
Loss of gloss	No effect	
Blistering	No effect	
Yellowing	No effect	
* Properties were checked on dry films at 0.127 to 0.152 mm thick, air dried for 7 days.		

ARMAFLOOR 500AU CURE TIMES

ArmaFloor 500AU Cure Times (All times are in minutes)						
	40°C	35°C	30°C	25°C	20°C	15°C
Slow	95	105	115	180	**240**	**330**
Medium	70	75	80	135	180	195
Fast	**45**	**50**	**55**	110	115	120
Times in red are not recommended.						
The tests above were performed in a controlled setting. Cure times should be considered as a guideline only, as various factors can affect the actual cure times.						

MIXING & RECOAT WINDOW

The components should be mechanically mixed at a medium speed allowing for no air entrapment. The sides and bottom of the mixing container should be scraped during mixing. This product is mass dependent and quantities greater than 4 litres should be mixed with care.

- Mix ratio 1:1 by volume
- Pigment ratio 10% by volume of mixed product (use only Rhino ArmaFloor pigments).
- Maximum thinning 10% by volume of mixed product (use only Rhino ArmaFloor Thinners).
- Dry Time 3-6 hours between coats depending upon ambient weather conditions.
- Recoat Time After 6 hours mechanically abrade (polyvac or sand) then wipe with acetone and recoat once the acetone has flashed off

CHEMICAL RESISTANCE

Excellent resistance to many chemicals. For a 7-day immersion in:

Gasoline	No effect
Brake Fluid	No effect
Skydrol	No effect
Coolant or Anti-Freeze	No effect
Ammonium hydroxide	No effect

SURFACE PREPARATION

See Rhino Linings® Application Standards for full surface preparation instructions. Substrate should be clean, dry (<5% moisture content) and free of oils and other contaminants. Rhino recommends diamond grinding or shot blasting for creating surface profile. Concrete Profile to be ICRI Standard CSP 2 to 4 prior to the first coat of ArmaFloor® 500AU. Old concrete floors previously contaminated with fats and oils should be tested for adhesion before application of polyaspartic compounds. **Acid or wet etching is not recommended.**

THICKNESS / COVERAGE

If used as a solid colour coating, primer, & 2 pigmented coats are required.
Total thickness for a flake floor finish (3 coats) is typically 300 – 500 microns.
Coverage – Approx 5m2/L per coat

© 2025 Rhino Linings Australasia Pty Ltd. All rights reserved

Technical Data Sheet

STORAGE & SHELF LIFE

ArmaFloor® AF500AU components should be stored in sealed containers at 15ºC -25ºC in a dry area and on pallet racks. Unopened containers have a shelf life of 12 months.

COLOUR OPTIONS

Natural Colour - Clear
Standard pigments, tint or colours available are: 15 colours (see AF500AU Standard Colour Range).
Decorative Flake (paint chips – small: see Rhino Colour Flake Selection Chart for more details.

BASE MATERIAL COLOURS

Clear

SAFETY PRECAUTIONS

Health Considerations: Consult the Rhino Linings Material Safety Data Sheets. Read and follow warning labels on all components. For professional use only. The uncured components of ArmaFloor® 500AU can cause irritation to the eyes, skin, and mucous membranes and are harmful if swallowed. When handling, avoid contact with eyes and skin (especially open cuts). In case of contact, immediately wash off with plenty of water for at least fifteen (15) minutes. For eyes, obtain medical attention. Always wash hands before eating. Obtain immediate medical attention in case of ingestion. ArmaFloor® 500AU contains isocyanates and may cause allergic skin and respiratory reactions. Do not use if you have chronic breathing problems (asthma) or if you have ever had reactions to isocyanates. When applying ArmaFloor® 500AU, avoid breathing harmful vapours. Introduce fresh air flow into the application area. It is recommended that fresh air-supplied standard painter's hood and full face respirator be worn by all personnel entering the area where ArmaFloor® 500AU is being applied until vapours have been exhausted. In case of extreme exposure or adverse reaction, remove affected personnel to fresh air immediately and obtain medial help. **Health Considerations: Consult the Rhino Linings Material Safety Data Sheets.**

For Your Protection: The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Rhino Linings Corporation. Users should conduct their own tests to determine the suitability of these products for their own particular purpose and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products made by Rhino Linings Corporation will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting the potential application results, **Rhino Linings Corporation makes no warranty of any kind, express or implied,** other than that the material conforms to its applicable current Standard Specifications. Rhino Linings Corporation hereby disclaims any, and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Rhino Linings Corporation for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.

© 2025 Rhino Linings Australasia Pty Ltd. All rights reserved