



Rhino Linings®

PREMIUM PROTECTION



Rhino PP1195

SIDE-A – ISO

SIDE-B - Resin

Revised Date: 15/07/2020

This TDS Replaces All Previous Versions

DESCRIPTION

Rhino PP1195 is an Australian made two-component, 100% solids, rapid curing, aromatic, elastomeric Pure Polyurea lining system designed for heavy duty industrial applications where high performance and rapid turn-around times are critical. Being a true Pure Polyurea, PP1195 will cure and exhibit full mechanical properties even when applied in high humidity, cold or moist substrate scenarios. Rhino PP1195 is tack free within seconds and can be walked on within minutes. This product has been continuously batched and made in Australia since the mid 1990's.

FEATURES AND BENEFITS

Aromatic lining systems such as Rhino PP1195 may show a colour shift in UV depending upon pigment chosen.

- High performance industrial lining for extreme application conditions such as low temperatures and high humidity.
- High physical properties including tensile, tear, and elongation properties.
- Excellent abrasion and impact resistance.
- Remains flexible through a wide temperature range.
- Good chemical resistance and corrosion resistance.
- Potable water certified in accordance with AS/NZS 4020:2018
- CSIRO Tested Class 2 waterproof membrane
- Bonds to virtually all substrates of any dimension, including metals, woods, concrete and fiberglass.
- Elastomeric properties allow for application to surfaces subject to vibration, expansion, contraction, movement, flexing, abrasion, and impact.
- Reduces noise from vibration and impact.
- Stable from -40°C to 125°C

TYPICAL USES

- Industrial and mining applications where rapid turn-around is critical.
- Secondary containment as a monolithic, impermeable lining for industrial plant, mining, agriculture, chemical and petrochemical applications.
- Primary containment in tanks and vessels subject to abrasion and/or substantial substrate movement.
- Protection against food acids, processing chemicals.
- Water and wastewater applications.
- Industrial flooring subject to heavy vehicle traffic.
- Material hoppers and chutes

NOT RECOMMENDED FOR

- Sustained temperatures below -40°C or above 125°C.
- Application to high density polyethylene or thermo plastics.
- Do not apply to concrete with curing or sealing membranes.
- Do not apply to substrates affected by moisture content in excess of 5%.
- Do not apply to concrete less than 28 days old .
- Avoid applying in conditions with high humidity.
- **NOTE** – Substrate temperature **must** be 3 °C above the dew point prior to application

TYPICAL PHYSICAL PROPERTIES OF RHINO PP1195

Hardness (Shore A)	95±5	ASTM D2240-15
Tensile Strength (PSI)	3200-3400	ASTM D412-16
Compressive Yield (MPa)	5.9	ASTM D695-02
Elongation (%)	240-260	ASTM D412-16
Tear Resistance (pli) Die C*	530	ASTM D624-00(12)
Taber Abrasion Resistance	15 – 20	ASTM D4060-14
- (mg of loss/1000 cycle) CS17 Wheel, 1000 grams weight		
Water Absorption (%)	≤1.0	ASTM D570-98(10)

*Properties above were checked at recognized industry standard thickness of 3.18mm (1/8 inch)

CHEMICAL RESISTANCE

Very good resistance to many commercial and industrial chemicals such as acid, alkali, oils and cleaning chemicals. For specific applications and information, please consult the Rhino Linings chemical resistance chart or speak to Rhino Linings Technical representative for further information.

CHEMICAL PROPERTIES

Gel Time & Tack Free time	5-7 secs and 15-20secs
Walk on time	1 to 2 minutes
Full immersion in water	12 to 15hrs (depending upon application)
Cure time	98% 24 hours
Re-Coat time (max without priming)	6 hours
Mix ratio	1:1
Specific gravity	1.06L/kg

COMMON SUBSTRATES

Metals, wood, concrete, fibreglass, (will be subject to application of suitable Rhino primers) and geotextiles.

VOLATILE ORGANIC CONTENT

Zero VOC

DRY FILM THICKNESS RANGE (subject to application)

Varies based on application, typically used at a minimum of 2mm up to unlimited thickness.
Waterproof Coating Thickness (non-trafficable): 2mm to unlimited. Tank linings 3mm minimum

STORAGE AND PACKAGING

Rhino PP1195 components should be stored in sealed containers, in a dry area away from direct sunlight at 15°C – 30°C.
Constant 25°C recommended.

Available in 200L drums only.
Part A –230kg Isocyanate: 12 months, unopened; stored properly.
Part B – 200kg Resin: 12 months, unopened; stored properly.

BASE MATERIAL COLOURS

Isocyanate – yellow or light straw colour.
Resin – Opaque

COLOUR OPTIONS

Colour – Natural.
Available in 8 standard pigment colours – Custom colours are available by special order.

PROCESSING CHARACTERISTICS

The system settings required to achieve quality spray application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum quality.

Equipment Used	Spray Pressure	Process Temperature	Spray Gun	Mix Module
Graco EXP-1; E-XP2	2000psi – 3500psi	55°C - 65°C	Fusion – Air Purge	AR2929 or Greater
Graco E-10HP	1500psi – 2500psi	55°C - 65°C	Fusion – Air Purge	AR2020 – AW2222

NOTE - Processing temperatures are a guide only, please contact Rhino Linings Technical department for further details.

RE-APPLICATION PROCEDURES

Clean old Polyurea so it is free from contaminants, cleaning with biodegradable foaming agents or similar if necessary. Once cleaned and dry, abrade surface to gain a rough scratched profile (80 Grit sandpaper or nylon cup brush). Remove all dust with air and wipe substrate with acetone then prime using RhinoPrime 251 primer to TDS.

SAFETY PRECAUTIONS

Health Considerations: Consult the Rhino Linings Material Safety Data Sheets: The uncured components of Rhino PP1195 can cause irritation to the eyes, skin, 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.

Rhino PP1195 contains isocyanates and may cause allergic skin or respiratory reactions. Do not use if you have chronic breathing problems (asthma) or if you have ever had reactions to isocyanates. When applying Rhino PP1195, avoid breathing harmful vapours. Fresh air-supplied standard painter's hood and full-face respirator must be worn by all personnel entering the area where Rhino PP1195 is being spray applied until all 100% solid vapours have been exhausted. In case of extreme exposure or adverse reaction, remove affected personnel to fresh air immediately and obtain medical help. Store and transport according to regulation.

Important: Consult the Rhino Linings Material Safety Data Sheets: Read and follow warning labels on all components. For professional use only. Follow cautions and handling guidelines in Rhino Linings Technical Reference Manual. The information herein is believed to be reliable, but unknown risks may be present. All warranties of any kind, expressed or implied, including warranties of fitness for a particular purpose are specifically disclaimed.

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