

DESCRIPTION

Polyurea PU100™ is a 98% solid, aliphatic non-yellowing, high performance, heavy-duty and flexible two-pack polyurea coating system. Polyurea PU100™ can be used as a base coat only, or as binder for non-skid surfaces in residential, commercial and industrial environments. It is designed to be flexible and cure fast to achieve a fast return to service where down time is critical factor. Polyurea PU100™ is used as one-day system for driveways, protective floor coating, and decorative finishes like flake floor systems as base coat. This system requires a top coat with Polyaspartic PS90™ for maximum stain and tyre stain resistance. The products unique features and benefits are exceptional UV resistance and high gloss finish, high flexibility & crack bridging ability, brilliant water & chemical resistance, excellent high durability, excellent abrasion and impact resistance, joint less, easy and fast to apply, and easy to clean and maintain.

FEATURES & ADVANTAGES

- Superior colourfastness/ UV stable and Non-yellowing
- Fast cure & flexible
- Excellent wear resistance
- High durability
- Excellent water & chemical resistance
- Extreme abrasion resistance
- Extraordinary resilience
- Retards growth of mould, fungus, mildew and bacteria
- Perfect for heavy-duty environments
- Solvent free
- Easy to apply, clean & maintain

RECOMMENDED USE

- Bars, Pubs & Taverns
- Warehouses & Driveways
- Butcher Shops and Commercial Kitchens
- Food Processing Plants & Grocery Stores
- Schools, Stadiums & Hallways
- Showrooms, Garages and Workshops
- Lobbies, Lounges, Nightclubs & Foyers
- Salons, Retail Stores and Wineries
- Shopping Centres and Retail Flooring
- Museums, Office Buildings & Galleries
- Restaurants & Lunch Rooms
- Veterinary Clinics, Zoos & more...

TECHNICAL DATA & CHARACTERISTICS

APPEARANCE	Liquid
COLOUR	Clear
VOLUME SOLIDS	98 %
FINISH	Gloss
COVERAGE	5 – 10m ²
MIX RATIO	1 : 1 (1 Part A to 1 Part B)
PACK SIZES	8L Kit / 4L Polyurea PU100™ Part A, 4L Hardener Part B
SPECIFIC GRAVITY	Part A 1.01 kg/l Part B 1.01 kg/l
POT LIFE	25 – 45 minutes
DRYING TIME	Touch Try 2 – 6 hours @ 25°C
RECOAT TIME	6 – 16 hours @ 25°C
FULL CURE	Foot Traffic 4 – 12 hours, Vehicular Traffic 24 – 26 hours, Chemicals 48 hours 25°C
SHELF LIFE	12 months, if properly stored in original unopened containers at temperatures between 10° C and 30°C, away from sunlight.

* The pot life time depends on climatic conditions and temperatures.

** Drying times generally depend on air circulation, temperature, film thickness, and application methods. The figures given above are typical with good ventilation, typical film thickness and single coat application.

SURFACE PREPERATION

All surface preparation has to be carried out to Australian Standard or International Standard. New concrete must be cured for a minimum of 28 days before a coating.

Concrete moisture test should be carried out prior coating application as per Standard ASTM4263 and/ or International Standard. The moisture content should be less than 4%.

Surface to be treated must be structurally sound and the substrate compressive strength should be at least 25MPa. All non-structural cracks, holes and surface deformities should be repaired.

In general, the surface to be treated **MUST** be clean and free of all traces of loose material, dirt, debris, mildew, oil, grease, old coatings, curing compounds, release agents, laitance, dust and other contaminants.

All new or old concrete surfaces should be prepared by mechanical grinding, abrasive blasting, blast-tracking, or any other suitable preparation/cleaning methods. Check if all traces of oil and other contaminations has been completely removed. Sprinkle a few water drops over the surface, if all water is quickly absorbed, the surface is sufficiently oil and grease free. If the water beads up, even in certain areas only, further preparation/cleaning has to be carried out.

For more detailed information, see following standard codes of practice, guides and techniques:

ASTM D4258 Standard practice for surface cleaning concrete for coating

ASTM D4259 Practice for abrading concrete

ASTM D4260 Practice for liquid and gelled acid etching of concrete

ASTM D4262 Test method for pH of chemically cleaned or etched concrete surfaces

ASTM D4263 Test method indicating moisture in concrete by the plastic sheet method

ASTM D4285 Test method for indicating oil or water compresses air

APPLICATION & GUIDELINES

Mixing

Mix Polyurea PU100™ (1 Part A) with Polyurea PU100™ Hardener (1 Part B). The mix ratio is 1:1. Always add Part B into Part A and make sure you add Part B slowly while mixing Part A. Use a mechanical mixer to ensure thorough mixing and avoid aeration when mixing the product. Use a lint free epoxy roller to apply the product. Always mix full pack sizes to avoid incorrect measure of ratio.

Tint Packs

Stir well before use.

APU Colour Tint Pack™ comes in 1000ml, use only 500ml per 8L Polyurea PU100™ kit.

Mix APU Colour Tint Pack™ with Polyurea PU100™ Part A. Assure APU Colour Tint Pack™ is properly measured. Use a mechanical mixer to ensure thorough mixing and avoid aeration when mixing the product. Do NOT mix APU Colour Tint Pack™ at the same time with Part A and Part B of two pack systems. Always add Part B later and mix with Part A, after APU Colour Tint Pack™ has been fully dispersed in Part A and any aeration has disappeared.

Application

Always prime surface with Water Based Epoxy WEP32™ before the first coat to archive maximum adhesion, prevent pin holing and to minimise sink-back of material. Prime coat with approximately 10-15m²/L, check for pinholes and do a 2nd prime coat if necessary.

If thinning of the Polyurea PU100™ is required, you can add 5% Solvent SLP100™ or 5% Solvent SNF150™. Discard all leftover material. Do NOT pour mixed unused material back into the original container as this will start the whole material to react and cure within the drum.

Two coats as minimum recommended. Use a lint free epoxy roller to apply the product. The second coat has to be applied within 16 hours of the application of the first coat to ensure the second coat will bite into the first coat. After 16 hours the first coat has to be sanded prior application of the second coat to assure a sound adhesion between coats. Different finishes can be achieved with Gloss, Satin or Matt finish Urethanes.

Curing Times

Pot Life: 25-45 minutes, Touch Dry: 2-6 hours, Foot Traffic 4 – 12 hours, Vehicular Traffic 24 – 26 hours, Chemicals 48 hours at 25°C.

Allow coating to cure for at least 12 hours before subjecting to light pedestrian traffic and at least 24 hours for vehicular traffic. The pot life time depends on climatic conditions and temperatures. All drying times depend on film thickness, ventilation, temperature, humidity and application methods.

Cleaning

Clean all equipment immediately after use with Solvent SGP80™ or Solvent SLP100™.

Coating Maintenance

In general dirt, dust, contaminants, and excessive wear and tear will shorten the life of coating. Keep these areas clean and free from such pollutants and avoid excessive wear and tear. Clean coating regular with warm mild detergent water up to 60°C and rinse with clean water. Do not use abrasive brushes, scouring pads or solvent to clean the coated surface. It is advisable if abnormal wear and tear will occur through moving furniture such as office chairs, keep these areas protected with a protective mat.

Compatibility & Suitability

Do NOT mix this product or use this product in combination with any other products or brands. Due to the differences in substrates, material and site conditions, and environmental surrounds, the applicator holds whole responsibility for checking the products suitability for its intended purpose prior application. Only products of the same brand/system should be used in combination as a system.

PRECAUTIONS

Safety Data Sheet and Technical Data Sheet must be read before using and opening this product. Keep out of reach of children. Always wear personnel protective equipment (PPE) when handling this product. Keep away from heat and flame. No smoking. Provide adequate ventilation. For more details refer to safety data sheet (SDS).

Do not apply if the air or surface temperature is below 10°C, or if the temperatures are subject to drop below 10°C during applying, or after application within the curing time.

Do not apply if substrate is subject to hydrostatic pressure or rising dampness.

Do not apply if surface is subjected to unusual high temperatures above ambient temperature.

Do not apply if the surface temperature is over 30°C, or if the surface temperature is subject to raise above 30°C during applying, or after application within the curing time, or if relative humidity is suspected to become above 85%.

Do not apply if substrate is subject to rain or moisture, and protect surface at least 24 hours against any water impact, or moisture after application within the curing time. Do not use any product past its pot life. Store locked up, in a cool, dry, well ventilated place, away from sunlight, between 10°C and 30°C. Keep container tightly closed.

DISCLAIMER

Do not apply this product if there is uncertainty about application or surface preparation. This Technical Data Sheet is to be used as a guide only; it is NOT a specification. Durable Concrete Coatings Pty Ltd has no control over the use or storage of this product and therefore does not accept liability in this regard. Any verbal advice given should not be regarded as authoritative information. This information is subject to change without notice, therefore all applicators should ensure they have current information. This product is intended for the use only of skilled tradesman and where applicable, statutory licensed tradesmen experienced and trained in the use of this product. Due to differences in substrates, application methods and local conditions purchasers of these products must ensure that it is suitable for their specific application before using these products. While the information contained in the TDS and SDS is accurate to the best of our knowledge, Durable Concrete Coatings Pty Ltd cannot guarantee that the information contained is wholly comprehensive. Subject to the provisions of the Trade Practices Act, the Company's liability in relation to defective product shall be limited to replacement of the product, proving the product to be defective. Durable Concrete Coatings Pty Ltd all terms and conditions apply.

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