

(TECHNICAL BULLETIN)

ASTEC WATERPROOFING PRODUCTS AND SYSTEMS

SINGLE PACK RAPID DRY POLYURETHANE SYSTEM

Uretec-R

PRODUCT TYPE

Polyurethane system consisting of a primer and topcoat.

DESCRIPTION / USE

Uretec-R is a single pack, rapid dry, moisture curing polyurethane consisting of a primer (Uretec-RP) and topcoat (Uretec R). The finished film is tough and durable, will withstand industrial traffic, exhibits excellent abrasion resistance and resistance to petrol, solvents, oils and greases, dilute acids and alkalis, and oxidising agents.

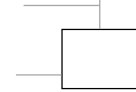
Uretec-R is recommended for coating timber and composite board, interior flooring materials, concrete shuttering and concrete floors. Uretec-R is for use on interior surfaces only.

PROPERTIES

Uretec-R cures to a durable, tough, flexible film which resists petrol, most aromatic and aliphatic solvents, oils and greases, dilute acids and alkalis, oxidising agents and can easily be cleaned with a mop. Whilst the service life of the coating depends upon the severity and frequency of traffic, it is used on surfaces ranging from concrete factory floors carrying fork lift traffic to timber basketball stadium floors.

NOTE: REFER TO PAGES 4-6 FOR A COMPREHENSIVE LIST OF CHEMICAL SOLVENT RESISTANCE TEST RESULTS.

Astec Paints are a 100% Australian owned company committed to the research and development of technologically advanced coatings that provide premium durability against our harsh Australian conditions. Our coatings are manufactured with high regard for worker safety and environmental care and will provide you with absolute confidence in long term performance.



PREPARATION

GENERAL

- Ensure that all surfaces are clean, dry, free of contaminants and structurally sound.
- Ensure that the surface is free of oils and silicones thus eliminating sources of adhesion failure.
- Blast clean bare metal surfaces to AS1627.4 Class 2 where permissible, otherwise clean with a power wire brush.

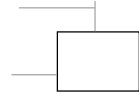
CONCRETE FLOORING

- Concrete must be clean and dry in sound condition and all loose powdery concrete must be removed.
- New concrete must be 28 days old before coating commences and all traces of curing compound must be removed.
- On or below grade concrete should not be coated if a water problem exists.

- Smooth troweled or surface hardened concrete floors require scarifying to ensure proper adhesion. Acid etching, power grinding [sanding] or sandblasting is recommended to rough the surface.
- To remove grease, oil and other penetrated contaminants, use a commercial grade concrete cleaner or scrub with a strong detergent and rinse thoroughly.

APPLICATION

Prime concrete, timber and composite board surfaces with one coat of Uretec-RP using a brush or roller and allow to cure until the surface is no longer tacky, usually 2 to 3 hours. Apply Uretec-R direct from the drum by brush or roller. Apply two coats, allowing the product to cure until the surface is no longer tacky between coats, usually 3 to 4 hours.

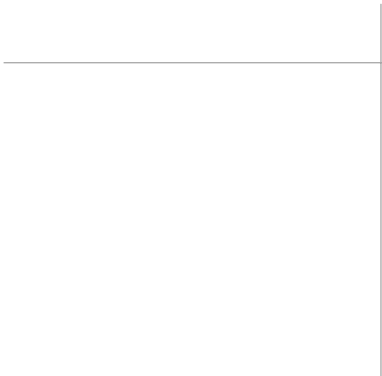


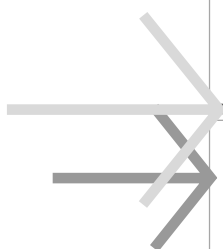
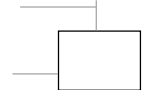
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→ **LIMITATIONS**

Experience has indicated that Uretec-R is more tolerant than other similar preparations with respect to its stability in half filled covered drums over a period of a few days. However, care should be taken to avoid such situations as it will ultimately lead to the gelling of the un-used product in the drum.





**CHEMICAL SOLVENT RESISTANCE:
24 HOUR SPOT TEST RESULTS**

CODES USED

DEGREE OF EFFECT

NE No effect
 SL Slight
 M Moderate
 CON Considerable
 SEV Severe

EFFECT

SO Softening
 P Pimpling
 B Blistering
 D Discolouration

RECOVERY

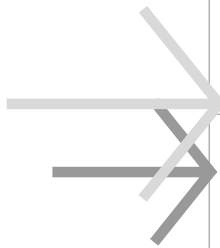
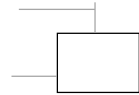
R Recovers
 NR No Recovery to usable film
 CD Completely Destroyed
 (1) Discolouration Remains

AGENT

% STRENGTH

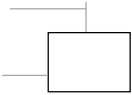
RESISTANCE

| | | |
|-----------------------|-----|----------------------|
| Acetic Acid | 0.5 | NE |
| Acetic Acid | 5 | M; SO; R |
| Acetic Acid | 10 | SL SO; SL P; R |
| Acetic Acid | 50 | SEV SO; B; NR |
| Acetic Acid - Glacial | | CD |
| Acetone | | CD |
| Ammonia Solution | 10 | M SO; SL P; R |
| Ammonia Solution | 20 | SL SO; SL P; R |
| Anti Freeze Solvent | 50 | SL D; NR |
| Bleach Solution | | SL SO; SL B; SL D; R |
| Boric Acid | 10 | SL SO; SL P; R |
| Brake Fluid | | SL SO; R |
| Calcium Chloride | 50 | NE |
| Calcium Hydroxide | 10 | SL SO; M P; R |
| Citric Acid | 10 | NE |



**CHEMICAL SOLVENT RESISTANCE:
24 HOUR SPOT TEST RESULTS**

| AGENT | % STRENGTH | RESISTANCE |
|-------------------|------------|---------------------------|
| Citric Acid | 50 | SL SO; R |
| Citric Acid | 70 | SL SO; SL P; R |
| Coca-cola | | NE |
| Coffee | | NE |
| Crayon | | NE |
| Ethanol | 50 | M SO; P; R |
| Ether | | NE |
| Ferrous Sulphate | 10 | SL SO; SL P; R |
| Formaldehyde | | CON SO; SL P; SL D; R (1) |
| Glycerine | | NE |
| Hydrochloric Acid | 10 | SL SO; R |
| Hydrochloric Acid | 18.5 | MO SO; SL P; R |
| Hydrochloric Acid | 37 | SEV SO; SEV B; NR |
| Hypoid Grease | | NE |
| Isopropanol | | M SO; SEV B; NR |
| Ink | | SL D |
| Lactic Acid | 10 | SL SO; SL P; R |
| Lactic Acid | 100 | SEV SO; SEV B; NR |
| Merthiolate | | M D |
| Motor Oil | | NE |
| Mustard | | SL D |



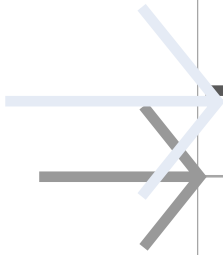
**CHEMICAL SOLVENT RESISTANCE:
24 HOUR SPOT TEST RESULTS**

| AGENT | % STRENGTH | RESISTANCE |
|--------------------------|------------|---------------------------|
| Nail Polish Remover | | NE |
| Nitric Acid | 10 | M SO; SL P; SEV D; R (1) |
| Nitric Acid | 50 | CON SO; M B; SEV D; R (1) |
| Peracetic Acid | 3 | M SO; SL P; M D; R (1) |
| Perchlorethylene | | SL SO; R |
| Petrol | | SL D |
| Phosphoric Acid | 2 | M SO; SL P; R |
| Pine Tar Oil | | M D; NR |
| Red Lipstick | | SL D |
| Red Nail Polish | | NE |
| Ride Solution | 0.25 | SL SO; SL P; R |
| Shoe Polish | | SEV D |
| Sodium Chloride | 10 | SL SO; R |
| Sulphuric Acid | 2 | M SO; SL P; R |
| Sulphuric Acid | 10 | M SO; R |
| Sulphuric Acid | 33 | SL SO; R |
| Sulphuric Acid | 50 | SL SO; SEV B; NR |
| Tea | | NE |
| Tobasco Sauce | | SL D; NR |
| Transmission Fluid | | NE |
| Urine | | NE |
| Vinyl Toluene | | SL SO; R |
| Windscreen Washh Solvent | | SL SO; SL P; R |
| Worcestershire Sauce | | SL D; NR |
| Xylene | | CON SO; SL P; R |



Uretec-R

PRODUCT DATA



URETEC-RP:

- Curing Time 2 - 3 hours to tack free
- Theoretical Spread Rate per coat 10 m² per litre over concrete, timber, and composite board
- Recommended Thinners Astec Brush'n'Roller Wash

URETEC-R:

- Curing Time 3 - 4 hours to hard dry,
12 - 24 hours ready for use
3 - 7 days full cure
- Recoat Time @ 25°C, 55% RH 3 - 4 hours
- Theoretical Spread Rate per coat 5m² per litre [metal]
5m² per litre [flat concrete]
- Recommended Thinners Astec Brush'n'Roller Wash

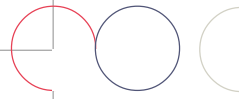
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