

## ArmourCoat® Polyurea HYBRID Soft Flexible SF Slow Set

**INTERIOR & EXTERIOR**

**SOLVENT FREE**

**2K**

### Description:

A two component, solvent free elasticized aromatic polyurea based, liquid waterproofing sealant / coating. The material cure rapidly to form a seamless membrane in under two hours.

### Intended Uses:

Applied to suitably primed concrete or metal surfaces to provide a highly elastic, weather, shock & waterproof seamless membrane, applied in 1 layer from 1.5 to 2.5mm thick.

Recommended for bathrooms, verandas and balconies, gutters, flower boxes or containment areas, waterproofing under tiles or waterproofing of areas exposed to pedestrian traffic, roofs etc. This system can be made non-slip by the incorporation of NON-SKID AGGREGATE.

Over-coatable with aliphatic polyurethane topcoat to provide enhanced weather resistance and colour stability.

Apply with a brush, roller, squeegee, or airless spray in one or two coats with a minimum total consumption of 2 to 3.5 Kg/ m<sup>2</sup>.

### Features & Benefits:

- Tough, elastic, and flexible.
- Glossy appearance
- Crack bridging capability.
- Thermal & sound isolation characteristics.
- Excellent adhesion.
- Excellent mechanical properties, high tensile and tear strength, high abrasion resistance.
- Easily repairable.
- Chemical & solvent resistant.

### Technical Data:

|                                                  |                                                                     |
|--------------------------------------------------|---------------------------------------------------------------------|
| Mixing Ratio (By weight)                         | 4.5 : 0.5 by Mass                                                   |
| Comp. A                                          | ArmourCoat® Polyurea HYBRID Soft Flexible SF Slow Set Comp. A (ISO) |
| Comp. B                                          | ArmourCoat® Polyurea HYBRID Soft Flexible SF Slow Set Comp. B (POL) |
| Volume Solids Mixed %                            | 100                                                                 |
| Mixed Density                                    | 1.1 Kg/ Lt                                                          |
| Pot Life after Mixing @ 25°C                     | 90 – 120 minutes                                                    |
| Tack Free time                                   | 12 hours                                                            |
| Overcoating Time                                 | 12 hours                                                            |
| Re-coating Time                                  | 18 – 24 Hours                                                       |
| Hardness Shore A/D                               | 50/07                                                               |
| Tensile Strength DIN EN ISO 527 (Mpa)            | Approx. 9                                                           |
| Elongation at break, DIN EN ISO 527 %            | Approx. 670                                                         |
| Tear propagation resistance, DIN ISO 34-1 (N/mm) | Apptox. 40                                                          |
| Application Temperature (°C)                     | 10 – 40                                                             |
| Colour                                           | Black or clear                                                      |
| Consumption @ 2.00 mm                            | 2 Lt / m <sup>2</sup>                                               |

### WATERPROOFING: LIQUID MEMBRANES & COATINGS

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

|                    |                                                                                                                                                 |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Thickness Required | First coat: 0,1 – 1.75 Kg/ m <sup>2</sup> . Second coat: 1.0-1.75 Kg/ m <sup>2</sup><br>Minimum total consumption: 2.0 – 3.5 Kg/ m <sup>2</sup> |
| Packaging          | 5 Kg Kit<br>20 Kg Kit                                                                                                                           |

## Typical Exterior System on Concrete/Metal:

**Primer is applied in 1 to 2 layers to ensure no substrate porosity, 4 hours drying @ 25°C**

| Layer     | Product                                                  | Consumption                                               |
|-----------|----------------------------------------------------------|-----------------------------------------------------------|
| Primer    | 1K PU Primer                                             | 6.5 m <sup>2</sup> /Litre @ 100µm DFT                     |
| Body Coat | ArmourCoat® Polyurea HYBRID Soft Flexible SF<br>Slow Set | Minimum total consumption: 2.0 – 3.5 Kg/ m <sup>2</sup> . |
| Topcoat   | PU 55 HB Topcoat                                         | 6.87 m <sup>2</sup> / Litre @ 80µm DFT                    |

## Application:

Component A & B are packed in separate containers in pre-measured weight proportions. Component B should be added to Component A while mixing with low revelation mixer of 300 – 600 RPM for 2 minutes. The sides and bottom of the mixture should be incorporated to ensure a homogeneous mix. Once mixed the material should be used within 20 – 30 minutes of mixing @ 25°C.

Pour the mixture onto the primed surface and spread using V notch trowel, smooth over with a trowel or roller. It should be applied in 2 layers.

After allowing to cure for 24 hours the application of finishing coat PU 55 HB Topcoat be applied in 2 layers. Do not exceed 48 hours between coats, abrade or re-prime if exceeded.

## Surface Preparation:

Substrate pre-treatment always include the following necessary steps prior to application of a flooring compound:

- New (concrete) substrates must be at least 4 – 6 weeks old.
- Mechanical strength subfloor should be: Compression Strength ≥ 25 MPa; Tensile Strength > 1.5 MPa. Resp. ASTM C39 & C1583.
- The moisture content (CM-method) of the concrete / cementitious subfloor must be < 3 – 4 %, < 0.2% Anhydrite, < 2 – 4 % Magnesite before a floor coating can be applied.
- Cleaning the subfloor, cementitious residues & other by-products (Calcium Carbonate Anhydrite) by (diamond) sanding, shot blasting etc.
- Old resin flooring compounds that adhere well to the substrate need to be cleaned & sanded thoroughly. If there are doubts about their adhesion onto the substrate, adhesion tests should be carried out.
- Chemical residues, grease/oil etc. need to be removed (chemical cleaning, steam, detergents, flame-blasting).
- The substrate needs to be free from any loose /crumbly components. Gaps, cracks, holes etc. must be repaired prior to laying the first coat.
- All dust needs to be removed.
- If there are doubts about adhesion onto a substrate, an adhesion test must be carried out prior to the application.
- Porous and absorbent substrates require the use of a pore primer, to improve surface strength and to reduce capillary action of substrate pores. They also form a moisture barrier and improve Intercoat adhesion. Two-component epoxy-based primers & scratch coats etc. are commonly used for this purpose. Their suitability in terms of adhesion and overcoat-ability time however must be tested beforehand.
- Subfloor temperature should be at least 3 degrees above the dew point and not below 10°C.

## Storage:

12 months in original un-opened containers in dry places at 25°C. no direct sunlight and temperatures above 30°C or below 5°C.

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### **Caution:**

The application must take place in well-ventilated places using protective gloves. Skin or eye contact must be avoided, otherwise wash carefully with soap & water. Refer to material safety data sheet for more information.