

SMARTCARE HYPERTRON HYBRID POLYUREA

WATERPROOFING SOLUTIONS

Two component spray-applied hybrid polyurea.

PRODUCT DESCRIPTION

SmartCare Hypertron Hybrid is a spray-applied, fast-curing flexible membrane formulated from hybrid Polyurea technology, which can be built to any thickness in a single application. SmartCare Hypertron Hybrid provides a flexible, seamless, hard-wearing waterproofing membrane as a protection for a wide range of substrates with geometrically complicated connections and service outlets and upturns. Its rapid spray application and fast-curing characteristics enable shorter application times compared to traditional self-adhesive and torch-applied membranes. The systems cure to yield seamless membranes with long-term flexibility while sealing around the most complex waterproofing details.

KEY FEATURES

- **Seamless Waterproofing:** The product offers totally seamless waterproofing with no welding of joints required during application.
- **Fast Application Time:** It features an extremely fast application time, allowing for rapid coverage of large surface areas.
- **Instant Curing:** The coating becomes tack free in seconds and can be walked on within minutes of application.
- **Cost to Benefit Ratio:** It provides an excellent cost to benefits ratio, balancing high performance with economic value.
- **Rapid Return to Service:** The fast-setting nature ensures a rapid return to service, which saves both time and money for the project.
- **Eco-Friendly Formulation:** The product is 100% solids, VOC-free, and solvent-free, making it environmentally responsible.

- **Thermal Stability:** It exhibits excellent thermal stability, maintaining its integrity across varying temperature conditions.
- **Impact and Abrasion Resistance:** The membrane provides good impact and abrasion resistance to withstand mechanical wear and tear.
- **Substrate Conformance:** It conforms exactly to substrate shapes, eliminating potential stress points when covered with floor slabs or pavers.
- **Universal Adhesion:** It offers excellent adhesion to nearly all substrates, including concrete, steel, aluminum, wood, and foam.
- **Substrate Versatility:** The coating can transgress multiple substrate types in a single, continuous application.
- **Structural Strength and Elongation:** The product possesses good tensile elongation and high structural strength for durable protection.
- **Elimination of Protection Boards:** There is no need to use protection boards when backfilling, as the membrane is robust enough to resist damage.

PRODUCT BENEFITS



Fast Curing



Seamless Integration



High-strength Adhesion



VOC Free

PACKAGING

425 kg sets (Part A – 225 kg, Part B 200 kg)

TECHNICAL PROPERTIES

Properties	Value	
Colour	Not available	
Theoretical coverage	1 liter/m ² @ 1mm Thickness	
Mixing ratio (by volume)	1 : 1 Component A - MDI Pre-polymer Component B - Mixture of Polyether Amine and Polyol	
Recommended DFT (For project specific DFT recommendations consult with manufacturer)	Concrete Min. 1 mm Max. unlimited	Steel Min. 1 mm Max. unlimited
Tack free time	10 – 20 Sec	
Over coating window	0 – 12 hrs. (without prep and primer)	
Temperature range for application (ambient & substrate)	-10°C to +50°C	
Material temperature (Preconditioning)	25 – 30°C	
Material temperature (Spraying)	65 – 75°C	
Maximum relative air humidity for application	80 – 85 %	
Dew point limit (critical)	Substrate should be 3°C greater than Dew Point	
Curing/Loading after	Foot Traffic: 1 hour Mechanical: 2 hours Chemical: 12 - 24 hours	

MECHANICAL PROPERTIES

Properties	Value
VOC content (DIN EN ISO 11890 -1/ ASTM D 1259)	0%
Solid content (DIN EN 827 / ASTM D 2697)	100%
Viscosity@25°C (DIN EN ISO 2884-2/ ASTM D 4878)	Comp A: 500 – 1000 mPa*s Comp B : 700 - 1200 mPa*s
Density @ 20°C (DIN EN ISO 2811 -1/ ASTM D 1217)	Comp A: 1.11 ± 0.02 kg/L Comp B : 1.00 ± 0.02 kg/L
Tensile Strength (ISO 37 – 2005 / ASTM D 638)	≥16 Mpa
Elongation @ break (ASTM D 638 -17 a)	367%
Hardness (Shore D) (ISO 868 – 2003 / ASTM D 2240)	40 ± 5
Tear growth resistance (ISO 34 – 1 method A)	≥ 10 N/mm
Taber Abrasion (1Kg/1000 cycles) (ASTM D 4060)	CS17 wheel: < 10, H18 mg wheel : < 110 mg
Pull off Strength (DIN EN ISO 4624 / ASTM D 4541)	Concrete: 1.5 N/mm ² Steel : ≥4 N/mm ²

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

APPLICATION AREAS

- Roof and basement waterproofing and secondary containment application.
- Car Park Decks
- Large-scale waterproofing for commercial and industrial applications.
- Waterproofing applications where high humidity and high levels of residual moisture can't be avoided during application.
- Waterproofing for areas exposed to high wind abrasion
- Waterproofing of high-impact areas – plant rooms, trafficable roof decks
- Bridges, podium decks, culverts, and tunnels waterproofing.
- Waterproofing of water features, pools, ponds, and landscaping.
- When using an appropriate primer, it can be applied on steel, wood, and Glass Reinforced Polyester.

APPLICATION METHOD

- SmartCare Hypertron Hybrid Polyurea can only be applied using high-pressure heated plural component spray equipment by trained and approved applicators.
- In ambient temperatures below 15°C, chemical drums should be pre-heated using band heaters to 30 – 40°C.
- The B-side component should be thoroughly power-stirred before the commencement of spraying and periodically during the spraying process to ensure there is no settling out of the B-side chemical components.
- Both the A-side and B-side drums should be fitted with desiccant dryers.
- Compressed air supply should be supplied via an air dryer and should be oil and moisture-free.
- Primary heaters should be set between 65-75°C. Adjustments can be made on-site based on environmental conditions, mixing module size, and application circumstances.
- Hose heaters should be set at 70°C - 75°C. Adjustments can be made on-site based on environmental conditions, mixing module size, and application circumstances.

PRODUCT LIMITATIONS

Not available

STORAGE CONDITIONS

Store between 10°C and 30°C, ensuring the product is protected from freezing at all times.

SHELF LIFE

12 months when unopened and stored under recommended storage conditions.

SAFETY PRECAUTIONS

- Always wear protective gloves, goggles, and clothing during mixing and application to prevent skin or eye irritation.
- Avoid direct contact with skin or eyes; in case of contact, wash the affected area with plenty of clean water.
- If inhaled, move the affected person to fresh air immediately and seek medical advice if discomfort persists.
- Ensure proper ventilation at the site of application to avoid inhalation of fumes.
- Keep away from heat, sparks, and open flames. Do not smoke during handling.

CERTIFICATIONS

SmartCare Hypertron Hybrid Polyurea complies with DIN EN ISO 11890-1/ ASTM D 1259, DIN EN 827 / ASTM D 2697, DIN EN ISO 2884-2/ ASTM D 4878, DIN EN ISO 2811-1/ ASTM D 1217, ISO 37 – 2005 / ASTM D 638, ASTM D 638 -17 a, ISO 868 – 2003 / ASTM D 2240, ISO 34 – 1 method A, ASTM D 4060, DIN EN ISO 4624 / ASTM D 4541 and DIN EN 12701.

DISCLAIMER

The information provided in this Technical Data Sheet is based on laboratory tests, industry practices, and practical application experience. However, actual site conditions may vary and are beyond the manufacturer's control. Asian Paints makes no warranties, expressed or implied, and shall not be liable for any loss or damage resulting from improper usage, handling, or non-compliance with the recommended guidelines. Users are advised to test the product for suitability before full-scale application.