



Multi PU-Roof Coat

High-Performance Polyurethane-Based Waterproofing Coating

Product Attributes

Seamless waterproofing membrane



Highly elastic & Crack bridging

Water vapour permeable



Excellent adhesion on porous & non-porous surfaces
Used as a primer on dilution with water

UV Resistant, prevent yellowing and weathering
Breathable coating with moderate dirt pick up resistance



Green Pro Certified
Validates our effort in striving towards cleaner, more sustainable future.

TDS for polyurethane coatings (**Multi PU-Roof Coat**) provides essential information about the product's characteristics, application guidelines, and performance specifications. Engineers, contractors, and applicators use it to ensure the coating is suitable for the intended use.

Product Description

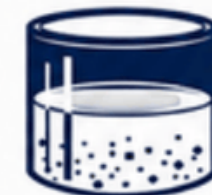
MULTITECH CHEMICALS manufactures **Multi PU-Roof Coat**, recognized for its excellent strength and durability. Polyurethane Coatings (**Multi PU-Roof Coat**) from Multitech Chemicals are ideal for a wide range of commercial and industrial surfaces. Sometimes referred to as Polyurethane Roof Coat, they form a protective coating over foam roof coatings as well as other commercial roof substrates, including modified bitumen, smooth BUR, concrete, and masonry. Polyurethane roof coatings are also an excellent choice for lining and sealing interior gutter systems.

Toxicity & Fungi Resistance



Non- toxic & Zero rating

Non – volatile Content



60 % by weight approx

Tensile Strength



Free film = $>1.5 \text{ N/mm}^2$ expected approx.
With Geotextile Fleece $>10 \text{ N/mm}^2$ expected approx.

Elongation at Break



Free film = $>350\%$ approx.
With Geotextile Fleece = 40 – 60% expected approx.

Aspect



White & Pasty

Density



1.25 – 1.30 Kg /L at 30° C

SRI (%) [Only applicable White Base] ASTM E1980 -11



>100

Part of what makes **Multi PU-Roof Coat** stand out is their flexibility, which helps them stand up well to even the harshest weather conditions. From extreme cold to extreme heat, our **Multi PU-Roof Coat** withstands the daily thermal expansion and contraction of roof structures to deliver long-lasting performance. They hold up well against the damaging effects of ponding water. Plus, they're more impact-resistant than many other coating materials, so they're a great choice for use on roofing systems with high-traffic areas.

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Technical Data

Type: Polyurethane

Color: White, Grey, Black, Sky Blue

Packaging: 15/20 KG Pure White Plastic Bucket

Storage Condition: 12 Month in unopened Packing, Between 5°C and 35°C

Property	Value	Test Method
Solid Content	> 75	
Viscosity @ 30°, CPS	± 2500 To 3000	
PH	Alkaline	
UV Stability	Excellent	
Solar Reflex Index (SRI)	101	ASTM C 1549, C 1371, E 1890
Specific Gravity @ 30°	1.5 ± 0.05	ASTM D 1475
Elongation %	>600	ASTM D 2370
Adhesion To Primed Concrete, Pull-Off	1.40 ± 0.2 2.0 ± 0.2 (W/Fabric)	ASTM D -2370
Strength Mpa		
Resistance To Bacteria	No Attack	ASTMD4299
Resistance To Alge	No Attack	ASTMG29
Tear Resistance	> 15 N	ASTMD142
Services Temperature	30 to 80 °C	
Shore Hardness	70	ASTMD2240
QUV Accelerated Weathering Test	Passes 2000 Hours	ASTMG53

Application of Multi PU-Roof Coat

1. Surface Preparation

- **Cleaning:** The roof surface must be clean and free of dust, dirt, grease, oils, and other contaminants. Power washing may be used to clean the surface.
- **Repairs:** Any existing cracks, seams, or damage in the roof must be repaired before applying the coating.
- **Priming:** For certain substrates like concrete or metal, a primer may be required to ensure optimal adhesion of the polyurethane coating.

2. Application Methods

- **Spray Application:** Polyurethane coatings are often applied using an airless sprayer for uniform thickness and seamless coverage.
- **Rolling or Brushing:** Smaller areas or detail work around vents, edges, or seams can be done using brushes or rollers.





- **Multi-Layer System :** Multi PU-Roof Coat is typically applied in multiple layers (base coat and top coat), with aromatic polyurethane often used as a base coat and aliphatic polyurethane as the top coat for UV resistance.

3. Curing

- **Multi PU-Roof Coat** cures relatively quickly, typically within 2–4 hours for the surface to become tack-free and within 24–48 hours for full curing, depending on environmental conditions (temperature and humidity).

4. Thickness

- Typical dry film thickness (DFT) ranges from 500–700 μm , depending on the recommendations and the roof's specific requirements. Thicker applications provide better durability and water resistance.

Recommended Substrates for Multi PU-Roof Coat:

- **Concrete:** Often used on commercial and industrial buildings with concrete roofs.
- **Metal:** Excellent adhesion to metal surfaces, commonly used on metal roofing systems.
- **Modified Bitumen:** Works well with modified bitumen roofing systems commonly used in commercial roofing.
- **EPDM and Other Single-Ply Membranes:** Can be applied to certain single-ply membrane roofing systems with proper primers.

Advantages of Polyurethane Roof Coatings

- **Seamless Waterproofing:** Provides a uniform, continuous membrane that eliminates seams and joints where water might penetrate.
- **Flexible and Durable:** Can withstand foot traffic, expansion, and contraction without cracking.
- **Energy Savings:** Reflective Multi PU-Roof Coat can reduce heat absorption, resulting in lower cooling costs.
- **Chemical and Abrasion Resistance:** Particularly beneficial for roofs exposed to harsh environments, such as industrial plants.
- **Ponding Water Resistance:** Polyurethane coatings maintain their integrity in areas prone to water pooling, which is a common challenge for flat roofs.

