# Polycryl PF

# Single component, acrylic waterproofing and protective coating

Especially designed for PU Foam UV resistance protection on roof applications

# **CHARACTERISTICS**

- ► Excellent UV, weatherability & color retention properties
- ► Single component. Easy to use
- ► Excellent resistance to water and moisture
- ► Breathable
- ► High solar reflectance
- ► Environmentally friendly. Low VOC (<10 g/L)
- Excellent adhesion on PU Foam and most porous substrates







# **DESCRIPTION**

Polycryl PF is a single component, acrylic waterproofing and protective coating especially designed for PU Foam on roof applications. Polycryl PF upon curing forms a tough, flexible and durable coating which is resistant to UV and other weathering agents, due these factors the coat will be perfect bonded to PU Foam surface, representing the safest option for both permanent and temporary exposed roofs.

# FIELDS OF APPLICATION

Can be used as a protective coating for a wide variety of applications, which includes the following:

- spray applied polyurethane foam
- protection coating for exposed roofs

# **APPLICATION INSTRUCTION**

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the acrylic coating system is as follows:

# Surface preparation

The surface shall be cleaned thoroughly of all contaminants. For concrete substrate, impurities like dust, traces of curing compound, oil and grease shall be cleaned thoroughly. Light mechanical grinding/grit blasting/high pressure water jet may be used to clean the surface of all the contaminants depending on the degree



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of contamination on the surface to be coated. All surface imperfections and protrusions shall be removed and repaired. Structurally unsound and friable concrete must be removed and repaired with a suitable Polycrete\* range concrete repair mortar.

#### **Priming**

On horizontal surfaces Polycryl PF can be applied directly without primer provided that recommended surface preparation has been carried out. A primer coat is recommended, particularly on the vertical surfaces to seal the pores and stabilize the surface. The primer coat can be made in the site by diluting the Polycryl PF 1 to 1 with water. The primer should be applied at a coverage rate of 5m²/L. Allow the primer to become dry (approx. 30 minutes) prior to the application of the top coating. On horizontal surfaces Polycryl PF can be applied directly without primer provided that recommended surface preparation has been carried out. Primer coat is not required when applied as a protection coating for PU Foams.

# Mixing

Polycryl PF is single component but stirring of the pail is recommended prior to the application of the coating. This will remove any sediment which may occur during storage. The use of a slow speed drill and suitable paddle should be

used in order to avoid the formation of air bubbles.

# **Application**

Apply the coating with a brush, roller or airless spray. Allow the coating to dry completely before applying the subsequent coats. 2 coats should always be applied; the second coat at 90° to the first. We recommend that Watertite CL 252 /a non-woven geo-textile membrane be embedded into the first coat whilst it is still wet at all expansion joints projections and corner fillets to reinforce these areas. Allow the final coating to cure fully (72 hours) after which it can be put in service. For roof applications, the coating shall be applied @0.85 L/m²/coat for a DFT of 1.0mm in 2 coats.

# **COVERAGE**

1.5 m<sup>2</sup>/L at 400 microns Dry Film Thickness.

#### **CLEANING**

Clean all the tools with water after use. Hardened materials can be removed mechanically only. Partially used materials in pails can be re-used; all cured and partially cured material should be removed before re-using the material.

# STORAGE AND SHELF LIFE

Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air - conditioned environment (<25°C). Shelf life is up to 12 months when stored as recommended.

# **HEALTH AND SAFETY**

As with all construction chemicals products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

#### **SUPPLY**

Polycryl PF 25kg pail

TECHNICAL SPECIFICATION		
PROPERTIES	VALUES	STANDARDS
Color	White	-
Density, [g/cc]	$1.35 \pm 0.05$	ASTM D 1475
Solid content, [%]	60 ±2	ASTM D 2969
VOC, [g/L]	<10	ASTM D 3960
Tensile strength, [N/mm²]	≥2	ASTM D412
Elongation, [%]	≥100	ASTM D412
Tensile strength retention after UV ageing, [%]	>90	ASTM D412
Elongation retention after UV ageing, [%]	>90	ASTM D 412
Adhesion to polyurethane foam [N/mm²]	≥0.5	ASTM D 4541
Adhesion to concrete [N/mm²]	≥1.5	ASTM D 4541
Water flood test	Pass	-
UV resistance @ 1000 Hrs	No deterioration	ASTM G 154
Application temperature	5°C to 45°C	-

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

