

# Polycryl PF

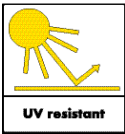
## Single component, acrylic waterproofing and protective coating

Specially designed with high UV resistance and solar reflectance for roof coating applications

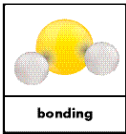


### CHARACTERISTICS

- ▶ 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)
- ▶ Superior adhesion on concrete, Polyurethane Foam and most porous substrates



UV resistant



bonding



waterproofing

### DESCRIPTION

Polycryl PF is a single component, acrylic waterproofing and protective coating especially designed for roof coating applications. Upon curing Polycryl PF forms a tough, flexible and durable coating that exhibits exceptional resistant UV rays and high emittance and reflectance (SRI) which reduces heat penetration. Polycryl PF offers excellent bonding to concrete, Polyurethane Foam and most porous substrates, positioning it as the safest and optimal solution for both permanent and temporary exposed roofs.

### FIELDS OF APPLICATION

Can be used as a protective coating for a wide variety of applications, including:

- Exposed concrete surfaces
- Spray applied polyurethane foam
- Protection coating for exposed roofs

### ENVIRONMENTAL INFORMATION

Contributes toward satisfying LEED® v4 requirements of the SS Credit for Heat-Island-Reduction and the EQ Credit-Low-Emission Materials (VOC content).

### 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:



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### 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 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 1:1 with water and should be applied at a coverage rate of 5m<sup>2</sup>/L. Allow to primer to dry (approx. 30 minutes) prior to the application of the top coating. A primer coat is not required when using Polycryl PF as a protective coating for Polyurethane Foam.

## Mixing

Polycryl PF is single component but it is recommended to stir the pail before application to remove any sediment that may have formed during storage. Use a slow speed drill and suitable paddle in order to avoid the formation of air bubbles.

## Application

Apply the coating with a brush, roller or airless spray. Allow the coating to fully dry before applying the subsequent coats. Two coats should always be applied; the second coat at 90° angle to the first. We recommend embedding Watertite CL 252, a non-woven geo-textile membrane, into the first coat while it is still wet at expansion joint projections and corner fillets to reinforce these areas. Allow the final coating to cure fully for 72 hours before putting it into service.

## COVERAGE

The coating should be applied @0.85 L/m<sup>2</sup>/coat for a Dry film thickness (DFT) of 500 microns per coat (1.0mm in 2 coats).

## 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.

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## 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, seek medical assistance immediately.

## SUPPLY

Polycryl PF 25kg pail

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	STANDARDS
Color	White	-
Density, [g/cc]	1.35 ±0.05	ASTM D 1475
Solid content, [%]	60 ±2	ASTM D 2369
VOC, [g/L]	<10	ASTM D 3960
Tensile strength, [N/mm <sup>2</sup> ]	≥2.9	ASTM D412
Elongation, [%]	≥100	ASTM D412
Solar Reflective Index SRI, [%]	>95	ASTM E1980
Tensile strength retention after UV ageing, [%]	>90	ASTM D412
Elongation retention after UV ageing, [%]	>90	ASTM D 412
Adhesion to polyurethane foam [N/mm <sup>2</sup> ]	≥0.5	ASTM D 4541
Adhesion to concrete [N/mm <sup>2</sup> ]	≥1.5	ASTM D 4541
Waterflood test	Pass	-
Application temperature	5° to 45 °C	
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.

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