

# KingProof® PUP

Polyurethane liquid membrane for protection of KingProof range.

## DESCRIPTION

KingProof PUP is an aliphatic one-component polyurethane liquid membrane which cures upon exposure to the humidity in the atmosphere producing a hydrophobic transparent membrane with excellent mechanical properties. KingProof PUP is highly resistance to UV radiation and will not be affected from direct exposure to sunlight.

## APPLICATIONS

KingProof PUP is recommended to be used as a top-coat over KingProof membranes to protect the colour from changing after exposure to direct sunlight as well as maintaining and improving the mechanical properties of the membrane. KingProof PUP can also be used to protect concrete and synthetic coats.

## ADVANTAGES

- ☐ Excellent heat and UV resistance.
- ☐ High mechanical properties and chemical resistance.
- ☐ Highly hydrophobic polyurethane resin.
- ☐ Wide service temperature range.
- ☐ Cold resistance, the membrane stays elastic down to minus 30°C.

## METHOD OF USE

### Surface Preparation

Surface must be clean dry and smooth, free from oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents and cured membranes must be removed.

### MIXING

When used as a top protection coat over KingProof membranes, add 10% pigment to KingProof PUP to achieve the final required colour and protection. Use a low speed mixture (300 rpm) and avoid trapping air bubbles.

### APPLICATION

Apply KingProof PUP with a brush, roller or an airless spraying machine in two coats with consumption of 0.15 g/m<sup>2</sup> per coat, leaving 24 hours between them.

Specific gravity	1.00 ± 0.05
Tack free time:	6 - 8 hr @ 25°C and 55% RH
Recoat time:	24 hr
Hardness shore D: ASTM D2240, DIN 53505, ISO R868	40
Service temperature	-40 to 80°C
Tensile strength at break: ASTM D412, EN ISO 527-3	40 MPa @ 23°C
Elongation: ASTM D412, EN ISO 527-3	> 300% @ 23°C
Maximum shock temperature:	200°C
Water vapour transmission: ASTM E96	0.8 g/m <sup>2</sup> .hr
QUV accelerated weathering test: ASTM G53	Passed (2000 hr)
Hydrolysis (8% KOH, 10 days @ 50°C):	No significant elastomeric property change
Hydrolysis: (5% NaClO, 10 days)	No significant elastomeric property change
Water absorption	< 1.4%
Thermal resistance: (200 days @ 80°C) EOTA TR011	Passed

## CLEANING

All tools should be cleaned after finishing with paper towels and then wipe by using KINGKRETE Solvent PU. Do not try to clean rollers.

## PACKAGING

KingProof PUP is available in 1, 4 and 20 litre pails.

## CONSUMPTION

Top-coat over KingProof membranes:

- ☐ First coat: 0.15 kg/m<sup>2</sup>.
- ☐ Second coat: 0.15 kg/m<sup>2</sup>.
- ☐ Total consumption: 0.3 kg/m<sup>2</sup>.

## TECHNICAL PROPERTIES

## STORAGE



# KingProof® PUP

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

## HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

## QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

\* Properties listed are based on laboratory-controlled tests.

® = Registered trademark of the KingKrete-Group in many countries.

### KK-SA-03.1-PF-PUP-R3-2601

**STATEMENT OF RESPONSIBILITY** The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

**NOTE** Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.

