PRODUCT DATASHEET

PlekoProof URP

DESCRIPTION

PlekoProof URP is Two component, hot applied pure polyurea, Fast curing waterproofing membrane that provides you with seamless and high abrasion & chemical resistance.

Product is 100% pure polyurea, volatile free system which is applied in a 1:1 mix ratio with a plural component spray equipment.

FEATURES & BENEFITS

- Total solids
- Fast application - application with two-component hot spray equipment
- Easy application to complicated details
- Fast curing with short overcoating time
- Seamless waterproofing membrane
- Elastic and crack bridging
- Excellent mechanical properties
- Good adhesion to most substrates
- Resistant to standing water

USES & APPLICATIONS

PlekoProof URP must be applied by professionals using plural-component spray equipment. System can be applied over:

Concrete, as abrasion resistant protective coating, waterproofing for concrete structures, walkways and balconies, floors and car park decks.

Steel, truck bed lining & wear resistant coating on hydraulic steel structures.

PACKGING

Part-A = Polyol
(200 Kg/Drum) (Blue color Drum)

Part-B = Low functional prepolymer
(225 Kg/Drum) (Black or Red color Drum)

STORAGE AND SHELF LIFE

- Part-A: 6 months
- Part-B: 6 months

The isocyanate component irritates the respiration system, eyes and skin. This can have allergic reactions if inhaled or when comes in contact with skin. The required measurements indicated in the safety data sheet should be noted during handling of isocyanate. The same procedure should also be applied during handling of the A system (polyol) considering the risk available.

IMPORTANT CONSIDERATIONS

- On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising vapour. Pleko Epoxy range of primers density and decrease product yield.
- Do not apply on substrates with rising moisture or are unstable. For wet substrates please apply **PlekoProof EP110** before the polyuria application.

MACHINE CONDITION

Mixing Ratio of Components:	1:1 (volume)	
Component Temperatures:	70 – 80 ºC	Depends on weather condition
Component Pressure:	160 – 180 Bar	

ENVIRONMENTAL CONDITIONS

Ambient Temperature:	Between +5 and +50 ºC	
Relative Humidity:	< 85 %	
Wind speed:	< 4 %	

SUBSTRATE CONDITIONS

Primer:	Flash coat of spray foam (1-2mm)	When needed
Substrate Temperature:	Between 10 and +48 ºC	Depends on weather condition
Substrate Humidity:	≤ 20 %	Porous substrates
	Without condensations on substrate	Nonporous substrates

APPLICATION PHYSICAL PROPERTIES

Physical property	**Standard**	**Unit**	**Value**
Shore A Hardness	ASTM D 2240	--	A/94/I
Tensile Strength	ASTM D 412	N/mm2	15
Elongation	ASTM D 412	%	> 300
Tear Strength	ASTM D 624	kN/m	68
Abrasion	ASTM D 4060	Mg loss (standard deviation)	1.4
Water Potability	BS 9620		Pass
Full cured	A23O C	Days	2-3

* Values will vary with differences in applications (i.e. Ambient conditions, process equipment and settings, material throughput, etc., Therefore, below values should be used as guidelines for purpose of evaluation.

APPLICATON INSTRUCTIONS

Substrate preparations – General recommendations:
The spray systems should only be applied to clean, dry and sound surfaces. Remove all dust, oil, grease and loose rust or any other foreign material to ensure adequate adhesion.

Concrete:
Concrete must be cured (+28 days) clean, dry & free from contaminants.
Loose cementitious substrates must be removed, blow holes and voids must be fully exposed.
Priming, surface levelling, repairs, filling of cracks & voids and must be carried out before application.
All dust, loose parts must be removed from all surfaces before application by brush or vacuum.
Other substrate cleaning guidelines can be consulted via SSPC-SP13, NACE 6 or ASTM D4259.
Concrete must have a minimum pull off strength of 1.5 N/mm2
A primer is generally needed to achieve an adequate adhesion. Please respect the recoat window recommendation from your supplier.

Metal/steel:
The metal surface needs to be prepared by means of sand blasting to near white. The surface profile will ensure adequate mechanical adhesion. Solvent cleaning is needed to remove the oil and grease.
If priming is needed, this should be done within 8 hours after the sandblasting to prevent any flash rusting.
The surface must be assessed and treated in accordance with ISO 8504 and ISO 8501-1:2007

Topcoats:
The system is not UV resistance. Therefore, a proper topcoat is needed for exposed application. Please respect the recoat window recommendation from your supplier.

CLEANING AND DISPOSAL

Clean all tools & equipment immediately after use.

TECHNICAL SUPPORT

PLEKO provides on-site assistance, as well as consulting services on projects when requested.

Technical data sheets on other **PLEKO** products and guidance on their uses are available upon request

HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

Additional Information

PLEKO provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

PLEKO designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction.

PLEKO reserves the right to change the properties of its products. All orders are accepted subject to our current term of sale & delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

PLEKO extends technical services to include after-sales support to assist users in the proper handling of our products.