

ARACO PU-WP

High Quality Polyurethane Liquid Membrane for Waterproofing and Protection

Product Description

ARACO PU-WP is a two-component high-quality polyurethane coating. It's a highly elastic, cold applied polyurethane waterproofing which cures into a membrane with excellent abrasion, mechanical, chemical, thermal, and UV resistance. ARACO PU-WP can be applied by brush, roller or airless spray machine. ARACO PU-WP is designed to have excellent adhesion on all common construction substrates.

Applications

Waterproofing and protection of:

- Roofs in both new construction and refurbishment projects (exposed or concealed) and for cool roofing for energy efficiency.
- Flower beds and planter boxes.
- Parking areas, as part of vehicular traffic system.
- Bridge decks, balconies, bleachers and terraces.
- Wet areas such as toilets, bathrooms, kitchens as an under tiling membrane.

Product Advantages

- Excellent adhesion to all common primed substrates.
- Easy and fast application.
- Provides a seamless waterproofing membrane.
- Highly resistant to abrasion, water etc.
- Mechanical properties unaffected by UV and other weather conditions. (Consult ARACO for optimum results).
- Crack bridging capability $\geq 2\text{mm}$
- Provides excellent thermal resistance over a temperature span of -40°C to $+90^{\circ}\text{C}$
- Good breathability characteristics which minimize the accumulation of humidity under the coat.
- Resistant to salty water, aqueous solution, diluted bases and acids, with and without appropriate topcoat. (Consult ARACO Technical Dept).
- Fills the non-structural capillary cracks by decreasing water absorbency of the concrete construction.



Package: 15 kg, 25 kg at mixed & fixed weight proportion

Surface Preparation

- The surface to be coated must be clean, sound, dust free and un-contaminated.
- Remove Loose parts, form release agents, cement laitance and paint.
- Substrate moisture should not exceed 5% (use moisture meter or polyethylene test in accordance of ASTM D 4263).
- New concrete structures need to dry for at least 28 days.
- Structurally unsound layers or surface contaminants must be mechanically removed by abrasive blast tracking, shot blasting, scarifying, or grinding.
- Substrates heavily impregnated with oil must be cleaned by torching, using suitable solvent or degreaser substance.
- Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- All ducts, loose and friable material must be completely removed from all surfaces before application of product, preferably by brush and/or vacuum.
- Minimum substrate temperature $+5^{\circ}\text{C}$ and maximum substrate temperature $+35^{\circ}\text{C}$ and maximum air humidity 85% R.H.

Priming

- It is recommended to prime all kinds of substrates using solvent-based polyurethane primer ARACO PU PRIMER or water-based epoxy primer ARACO PRIME SF.
- ARACO PU PRIMER can be used over porous and nonporous surfaces before the application of ARACO PU-WP.
- ARACO PU PRIMER should be applied using a brush or roller at a rate of 0.1 – 0.2 liter/m² (depending on the substrate porosity) to achieve 40 – 80 microns.
- Leave the primer to cure for 4 – 24 hours before the application of ARACO PU-WP.

Mixing

- Mix the two components separately with an electric mixer at low speed.
- Pour component B into the container of component A and mix drill with low speed (approximately 500 rpm).
- Stirring time at least 2-3 minutes until homogeneous mixture is achieved.
- Only prepare the quantity that can be applied within the pot-life (approximately 40 minutes at +25°C).

Product Application

- ARACO PU-WP should be stirred well before using.
- Apply the material with roller or brush with a film thickness of around 0.5 mm.
- After 6 – 24 hours apply the second coat. Apply at least two coats
- Don't leave more than 24 hours between coats.

Recommendations

- Avoid application in direct sun and/or strong wind.
- Do not mix ARACO PU-WP by hand.
- Apply only to sound and prepared substrates.
- Do not mix more material than can be used in one hour (pot life).
- When rain is anticipated within 48 hours after application, the surface should be protected.
- For best result the temperature during application and curing should be between 5°C and 35°C.
- Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish..

Consumption

First coat: 0.7 – 0.8 kg/m².

Second coat: 0.7 – 0.8 kg/m².

Total consumption: 1.4 – 1.6 kg/m² to give 1 mm dry film thickness. Depending on the condition of the surface and method of application.

Note:

Coverage rate takes no account of wastage and may vary according to the type of surface involved.

Technical Data

| | | |
|-----------------------|--|-----------------|
| Density of the mix | 1.350 ± 0.05 Kg/m ³ | |
| Dry Film Thickness | 0.5 mm / Layer | |
| Solid Contents | 65 ± 5 | |
| Substrate Temperature | +10°C minimum / +35°C maximum | |
| Pot Life | 40 minutes @ 25°C | |
| Tensile Strength | >12 N / mm ² | ASTM D412 |
| Tear Strength | > 60 N/mm | ASTM D624 |
| Elongation | 50 % | ASTM D412 |
| Resistance to UV | Pass | |
| Full cure | 5-7 days (Based on atmospheric temperature) | 25°C / 50% R.H. |
| Set to Foot Traffic | 48 h | 25°C / 50% R.H. |
| Time between coats | 18-36 hours maximum | 25°C / 50% R.H. |

Product Data

Composition **ARACO PU-WP** powder is blend of specially selected cements, silica sand and reactive fillers.

ARACO PU-WP liquid is component of blended acrylic copolymers and wetting agents.

VOC 350 gm/L

Storage condition Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates, the product must be stored in an air-conditioned environment.

Shelf Life 12 months minimum from production date if stored properly in original an opened packaging

Legal Notes

The information, recommendations, and application are based on ARACO current knowledge and experience of the products when properly stored, handled, and applied under normal conditions. ARACO products are guaranteed against defective materials and manufacture and sold subject to standard conditions. Users should always refer to the most recent technical data sheet for the product concerned, copies of which will be supplied on request.

Safety Instructions

The product may cause skin irritation. Wear gloves and goggles and apply barrier cream to your hands. In contact with eyes or mucous membrane. flush immediately with plenty of warm water and seek medical attention without delay.

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- Premixed mortar
- Tile adhesives & Grout
- Concrete Repair
- Flooring systems
- Protective Coating
- Waterproofing
- Bonding Agents
- Concrete Admixtures
- Surface Treatments
- Grout & Anchors
- Sealants
- Sports Flooring