



ARDEX WPM 450

Solvent-Free Polyaspartic Coating

Multifunctional - flooring and waterproofing membrane

Rapid polymerisation

Easy application

Wide temperature application range (-5°C to 30°C)

Adaptable to any substrate geometry

Resistant to UV radiation and weathering

Good chemical resistance

High mechanical resistance and trafficability

Available in any standard RAL colour

100% solids, solvent free

Internal and external use

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ARDEX WPM 450

Solvent-Free Polyaspartic Coating

DESCRIPTION

ARDEX WPM 450 is a liquid, two-component, cold applied polyaspartic coating with enhanced hardness and high mechanical strength and resistance. ARDEX WPM 450 can be applied on uneven surfaces, and is resistant to atmospheric agents, chemical agents, frost, and weathering. The rapid polymerisation of ARDEX WPM 450 means the surface is walkable after 2 hours.

ARDEX WPM 450 provides flooring that is easy to clean and maintain, with high mechanical and chemical performance. Once dry, it forms a continuous waterproof membrane, without joints or need for overlap or reinforcement.

USES

- Flooring areas subject to vehicle & pedestrian traffic
- Resistant flooring that is easily decontaminated in the chemical & food industry
- Decks, terraces, balconies, roofs
- Tanks and irrigation channels
- Protection or repairs to ARDEX WPM 400 membrane

SURFACE PREPARATION

Ensure that the substrate is hard, dry, solid and free of laitance, grease, dust or other loose particles such as paint, release agents, limescale, mortar, plaster, adhesive residues, etc., which may impair adhesion.

Remove all traces of varnish, waxes, fats, oils and similar contaminants prior to mechanical preparation. Prepare substrate with specialist machinery; sanding, milling or blasting machine depending on the state of the substrate. Vacuum the substrate.

Carry out repair work and fill any holes and cracks using the most suitable ARDEX product. Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints). When applied on metal surfaces, sandblast for cleaning/preparation.

PRIMING

Prime the substrate with ARDEX WPM 400 PRIMER. Do not allow the primer to dry for any longer than indicated in its technical datasheet, otherwise it will need to be sanded and reprimed.

MIXING

Stir the individual components of ARDEX WPM 450 before mixing. Thoroughly mix the two components with a mixer at low speed for a minimum of 3 minutes.

Part of the mixture can be reintroduced into the hardener container to gather remaining residues in the container. The mixture which has been reintroduced into the hardener container can be returned to the mixing container and stirred for a further 30 seconds. This mixing process ensures the product's consistency and that any residual resin remaining in the containers reacts.

Do not carry out partial mixtures by volume.

IT IS NOT ADVISABLE TO CARRY OUT PARTIAL MIXTURES BY VOLUME.

After the two components have been mixed, use immediately. 1kg of ARDEX WPM 450 remains workable for 20 minutes at a temperature between 18°C and 20°C.

APPLICATION

The mixture's reduced pot life should be taken into account - it is necessary to organise application without pauses.

1. Paint

Once components A and B are mixed, apply directly to the primed substrate using a rubber squeegee, completing the application with a medium nap roller to remove blemishes. The second layer should be applied as soon as the first is sufficiently cured (1.5 - 2.5 hours at 20°C). Apply at least 2 coats.

2. Multi-Layer

Apply a finishing coat of ARDEX WPM 450, using a rubber squeegee and short nap roller, to seal the surface and encapsulate the aggregate. Do not allow more than 12 hours to elapse between coats, otherwise sanding will be required.

LIMITATIONS

Do not use ARDEX WPM 450 where ambient and/or substrate temperatures are less than -5°C or less than 3°C above dew point. Do not use where ambient or substrate temperatures exceed 30°C or where ambient humidity exceeds 75%. If pot life is exceeded the mixed product loses characteristics and should be disposed of.

All ARDEX products are manufactured subject to rigorous quality controls and procedures; however, if strict colour consistency is required, it is recommended to use products from the same batch.

CLEAN UP

Clean tools and equipment immediately after use with an applicable solvent. Hardened product will need to be removed mechanically.

Any spillage from any of the products must be removed

immediately with sand, vermiculite or other inert material and collected in a suitable container for proper handling and treatment. Residues from spillage and empty containers must be dealt with in accordance with local regulations. See product safety sheet for further information.

STORAGE

ARDEX WPM 450 can be stored for up to 9 months in its original unopened packaging. The product should be stored in a dry place between 5°C and 25°C. Store protected from frost, direct sunlight, and heat sources.

COVERAGE

Paint: 400-500g/m² in two layers

Multilayer: 500-600g/m² of the mortar per layer

Top coat: Approx. 450g/m²

PACKAGING

ARDEX WPM 450 consists of two components and is available in 10kg kits.

PRECAUTIONS

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled). Toxic to aquatic life with long lasting effects.

Do not breathe dust, fumes, gas, mist, vapour, spray. Wear protective gloves, protective clothing, eye and face protection. In case of inadequate ventilation wear respiratory protection. IF ON SKIN: Immediately remove all contaminated clothing. Rinse with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if easy and present to do so. Continue rinsing. Immediately get medical attention and/or call a POISONS CENTRE. Dispose of contents/container to hazardous or special waste collection point, in accordance with local regulation. Contains isocyanites. May produce an allergic reaction.

Additional information is in the Safety Data Sheet at www.ardex.co.nz

TECHNICAL DATA

Characteristics	Test Method	Result
Density	BS 4370 P1 M4	1.35kg/L
Touch dry @ 20°C		40 mins
Application temperature		-5°C - 30°C
Elongation (23°C at break)	ISO 527	>50%

Toll Free Technical Services:
1800 224 070 (Australia)
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COLOUR CHART

						
RAL 1001	RAL 1011	RAL 1013	RAL 1014	RAL 1019	RAL 3009	RAL 5012
						
RAL 5015	RAL 5018	RAL 6011	RAL 6019	RAL 6021	RAL 7001	RAL 7004
						
RAL 7012	RAL 7016	RAL 7023	RAL 7030	RAL 7032	RAL 7035	RAL 7037
						
RAL 7038	RAL 7040	RAL 7042	RAL 7044	RAL 8004	RAL 8017	RAL 8024
						
RAL 9002	RAL 9005	RAL 9010	RAL 9016			
						
RAL 3005	RAL 3011	RAL 3013	RAL 4001	RAL 4005	RAL 5002	RAL 5003
						
RAL 5005	RAL 5007	RAL 5010	RAL 6001	RAL 6010	RAL 6016	RAL 6017
						
RAL 6026	RAL 7009	RAL 7031	RAL 8001			

*Indication of colour only.