

Pumadur PAS Clear

Clear aliphatic polyaspartic top coat



Description

Pumadur PAS Clear is a clear, two-component solvent free polyaspartic floor coating. **Pumadur PAS Clear** provides a UV-resistant, tough, hard wearing coating for use over decorative flake or quartz broadcast systems.

Appearance

Clear, high gloss finish.

Typical Uses

As a seal coat on highly decorative flooring systems including **Pumadur HPQ**.

Features & Benefits

- Fast cure. Ultra-quick return-to-service
- 100% solids. VOC free
- Excellent UV resistance
- Highly transparent
- Low viscosity
- Gloss, easy to clean finish
- Extremely durable & impermeable finish

Thickness

Approximately 200 microns per coat.

Typical Properties, 28 days at 20 °C

BS 8204-6	Type 3
Bond strength (BS EN 13892-8) (concrete failure)	> 3.0 N/mm ²
Impact resistance (BS EN ISO 6272-1)	4.4 Nm
Wear resistance (BS EN 13892-5)	< 50 µm
Hardness (Shore D)	67

The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary dependent upon site conditions.

Pack Size

2.5 and 5 kg units.

Pot Life

Material Temperature	Working Time*
10 °C	~ 30 minutes
20 °C	~ 20 minutes
30 °C	~ 10 minutes

* Usable working life of material following mixing and immediate spreading as per the application instructions.

Cure Schedule @ 20 °C *

Over coating time	90 mins. - 12 hours
Cure time to pedestrian traffic	~ 4 hours
Cure time to light wheeled traffic	~ 8 hours
Full cure	~ 5 days

If the over-coating window is exceeded then the coating must be abraded to ensure inter-coat adhesion. The floor should be protected from contact with water for at least 3 days after application.

* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions including film thickness, temperature and humidity. At lower temperatures or low humidity, curing times will be extended. Thicker films will take significantly longer to cure.

Coverage

The coverage rate will vary depending on the texture and porosity of the substrate, film thickness and application technique. Two coats may be required to avoid missed spots. The mixed density of the material is approximately 1100 kg/m³. As a guide, an application rate of 3.6 to 4.5 m²/kg will produce a film thickness of 200 to 250 microns on smooth, non-porous surfaces. On textured surfaces such as coloured quartz, typical coverage rates of 2.5 to 3.0 m²/kg may be expected. Do not apply at thicknesses greater than 250 microns as these films will take a significant amount of time to through cure.

Application Conditions

Pumadur PAS Clear may be applied between 10 °C and 30 °C. However, for best results, substrate and air temperature should be in the range 15 °C to 25 °C otherwise workability and cure rate may be impaired. Localised heating or cooling equipment may be required outside this range to achieve ideal temperature conditions. To reduce the risk of "blooming" or poor inter-coat adhesion caused by condensation, the climate above the uncured floor and the substrate should be maintained at least 3 °C above the dew point during application and for at least 48 hours after application. In any case, the ambient relative humidity should be between 30% and 75% during application and cure.

Surface Preparation

The surface to be coated must be clean, dry and free from oil, grease, dust and loose material or any other contamination that may impair adhesion or wetting out. High or low spots should be removed or repaired before

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proceeding. Remove excess flakes or aggregates from the surface by sweeping followed by vacuum. The use of light sanding is recommended for flakes to remove flakes standing proud.

When applied to a smooth resin finish it is possible that **Pumadur PAS Clear** may fish-eye due to surface tension. Lightly abrading the surface followed by solvent wiping may cure this problem. If in doubt, apply a trial area of the system before specifying.

IMPORTANT: Humidity in the atmosphere is required for the successful cure of polyaspartic based coatings. As a result, polyaspartic coatings will take a significant amount of time to through cure if applied in excess of the recommended film thickness (250 microns). It is especially important to ensure that the substrate is flat an defect free so that material does not pool in excess of the recommended film thickness.

Mixing

Materials should be conditioned at 15 °C to 25 °C for 24 hours prior to use. Pre-mix the resin component as there will be slight settlement in the bottom of the container. Add the hardener component to the resin component and mix using a low speed electric mixer (300 - 500 rpm) fitted with a suitably sized Jiffy-style paddle for at least 3 minutes until homogeneous. Keep the mixing head fully submerged to avoid air entrainment. Use a straight edged spatula to scrape the sides and bottom of the mixing vessel several times as unmixed material will result in uncured patches in the final finish. Do not add solvent/thinners to the product.

Pot Life

Mixed material must be used immediately. When mixed, a chemical chain reaction takes place which creates heat and further reduces pot life. High ambient temperatures and humidity will reduce pot life. Low temperatures and humidity increase curing time.

Application

Squeegee and back-roll to provide a uniform film of 200 to 250 microns and avoid pooling. Use a cross-rolling technique to ensure even coverage. If required, repeat the procedure for a second coat. Edges and difficult to reach areas may be applied thinly by brush. Plan the work area to maintain a wet edge and work within the working time of the material. Due to the rapid cure, roller sleeves should be changed regularly (at least every hour).

Tool Cleaning

Tools and equipment should be cleaned whilst the resin is still wet using **Pumasolve**.

General Maintenance

Pumadur PAS Clear can be easily cleaned using industry standard cleaning chemicals and techniques designed for synthetic resin flooring. Test cleaning agents prior to use. Do not steam clean or subject to temperatures in excess of 50 °C.

Limitations

As with all high gloss paint finishes, scratching of the surface may occur with use due to surface contamination and abrasion. Entrance matting and an effective cleaning regime will reduce these effects.

The use of **Pumadur PAS Clear** may not prevent discolouration of underlying coatings on exposure to UV light.

Be aware that settlement of dust, hairs, fluff etc. can impair the visual appearance of the finish.

Technical Advice

For further information on this or any other Resdev product, please contact our office.

Health and Safety

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Refer to hazard labelling on the product. Wear gloves and avoid contact with skin and eyes.

EU Directive 2004/42/EC

Complies with category j type SB (< 500 g/l).

Storage

Materials should be kept dry and stored in a weatherproof building maintained at 15 °C to 25 °C on pallets and away from walls. Consignments should be used in order of batch number. Protect from frost.

Shelf Life *

12 months if stored in accordance with the above recommendations.

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CE	15	DOP RV0087
EN 13813 SR-B2,0-AR0,5-IR > 4 Synthetic resin screed material for use internally in buildings		
Reaction to fire	E _{fl} ⁽¹⁾	Impact resistance > IR4
Release of corrosive substances	SR	Sound insulation NPD
Water permeability	NPD	Sound absorption NPD
Wear resistance	AR0,5	Thermal resistance NPD
Bond strength	B2,0	Chemical resistance NPD

⁽¹⁾ According to Commission Decision 2010/85/EU of 9 February 2010, the product satisfies all the requirements of the performance characteristic 'reaction-to-fire' class E_{fl} without need for further testing.

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