### Pumadur<sup>®</sup>

#### **Product Description:**

**Pumadur DP** is a textured, 4 part, polyurethane system, produced by fully broadcasting aggregate onto the **Pumadur DP** polyurethane screed base and sealing the surface with **Pumadur TF**. (see separate datasheet).

**Pumadur DP** has a variable textured finish which makes the product ideal for both wet and dry processing environments such as the food and beverage industry and commercial areas where a robust, high-performance floor is required.

#### **Appearance:**

Seamless, textured surface.

#### Features & Benefits:

Resin rich, easier and quicker to apply than trowel applied screeds.

Seamless surface.

Level of slip resistance is dependent on the size and profile of aggregates used.

#### **Thickness:**

6.0 mm - 9.0 mm.

#### Health & Safety:

Refer to product Safety Data Sheet before use.

#### **Technical Advice:**

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

#### **Available Colours:**

Please see price list for available colours.

#### **Surface Preparation:**

Inadequate preparation will lead to loss of adhesion and failure. Grinding, light vacuum-contained shot-blasting or planing is recommended. Percussive scabbling or acid etching is not recommended. Anchorage grooves should be cut to a width and depth of twice the thickness of the floor finish at the edges, bay joints, up-stands, drains, doorways and at regular points across the floor, and all debris removed. Refer to the Resdev Guide to Surface Preparation for further information.

For concrete bases in contact with the ground, a damp proof membrane should have been incorporated into the slab design, in accordance with the requirements of CP102 (Code of Practice for Protection of Buildings Against Water from the Ground).



#### **Application Conditions:**

Optimum substrate temperature range is 15 - 25 °C. Localised heating (electric powered warm air blower) or cooling equipment may be required outside this range to achieve ideal temperature conditions. The aggregates and fillers can be stored in a cool area (or warm area in the case of low ambient temperature) in order to control product temperature and working life.

The substrate and uncured floor must be kept at least 3°C above the dew point to reduce the risk of condensation or blooming on the surface, from before priming, to at least 48 hours after application.

#### **Application:**

Priming should be carried out using **Pumaprime SF**, taking particular care to prime, but not fill anchor grooves. (see separate datasheet). Prior to mixing, the temperature of the four components must be between 15 and 25 °C. Pre-mix the coloured resin component before use.

Add the hardener component to the coloured resin component and mix using a low speed electric mixer (300 - 400 rpm) for 1 - 2 minutes until homogeneous. Decant the mixture into a rotary drum mixer and add the filler component in stages, mixing for a minimum of 3 minutes until a uniform coloured, lump-free mix is obtained.

Apply to the required thickness using a steel float. Ensure that anchor grooves are fully wetted out with material.

While still wet, fully broadcast with the required aggregate at a rate of 4.0 - 5.0 kg per m<sup>2</sup>. When cured, remove excess aggregate using a brush and vacuum. Apply **Pumadur TF** at a rate of 0.3 - 1.2 kg per m<sup>2</sup>. (depending on aggregate chosen).



Pumadur\*

DP5: 0.4 - 0.7 mm aggregate: 0.3 - 0.4 kg per m<sup>2</sup> DP10: 0.7 - 1.2 mm aggregate: 0.4 - 0.6 kg per m<sup>2</sup> DP20: 1.2 - 1.8 mm aggregate: 0.7 - 0.9 kg per m<sup>2</sup> DP30: 1.0 - 3.0 mm aggregate: 1.0 - 1.2 kg per m<sup>2</sup>

#### **Cleaning:**

Regular cleaning is essential to enhance and maintain the life expectancy, slip resistance and appearance of the floor. **Pumadur DP** can be easily cleaned using industry standard cleaning chemicals and techniques. Consult your cleaning chemical and equipment supplier for more information. When applied at 9.0 mm thickness, **Pumadur DP** is fully steam cleanable.

#### Limitations:

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >85% or if the surface temperature is <3 °C above the dew point.

Application should not commence when the substrate temperature or the ambient temperature is or is anticipated to be <10 °C during the application or within the curing period. The design strength of concrete surfaces must be a minimum of 25 N/mm<sup>2</sup> compressive strength at 28 days. The manufacture of **Pumadur DP** is a batch process and despite close manufacturing tolerances, colour variation may occur between batches. Products from different batches should not be used on the same surface or surfaces close together.

If mixed batches are unavoidable, it is best practice to use the different batches only in areas where the colour cannot be directly compared.

Touching up should only be attempted using product from the same batch using the same application methods. Product should be reserved specially for this purpose. It is recommended that touching up is carried out up to a break in the floor or surface.

#### EU Directive 2004/42/EC:

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

Pumadur systems are not colour fast and may yellow over time. The rate of change will depend on UV light and heat levels and cannot be predicted. This will be more pronounced on lighter colours but does not affect the performance of the product.

PRODUCT INFORMATION						
Chemical Type	Textured Polyurethane Screed System					
Packaging: (Pumadur DP)	26.00kg Unit:	Resin: Hardener: Filler:	2.90kg 2.40kg 20.70kg			
	Then fully broadcast with the required aggregate at: 4.0 - 5.0 kg per m <sup>2</sup> .					
Packaging: (Pumadur TF)	3.20kg Unit:	Resin: Hardener: Filler:	1.00kg 0.80kg 1.40kg			
	8.25kg Unit:	Resin: Hardener: Filler:	2.53kg 2.11kg 3.61kg			
Shelf life	Resin & Hardener: Aggregate & Filler:	12 Months 6 Months				
Storage conditions	<b>Pumadur DP</b> must be stored off the ground in original packaging, unopened and un- damaged. The ambient conditions must be dry and between 10°C and 30°C with no direct sunlight. Protect from frost.					





APPLICATION INFORMATION							
Mixing Ratio	MIX FULL UNITS						
Consumption: (Pumadur DP)	Approx. 2.00 kg/m <sup>2</sup> per mm. $12 \text{ kg/m}^2 \text{ at } 6.0 \text{ mm}.$ $18 \text{ kg/m}^2 \text{ at } 9.0 \text{ mm}.$						
Consumption: (Pumadur TF)	DP5: 0.4 - 0.7 mm aggregate: 0.3 - 0.4 kg per m <sup>2</sup>						
	DP10: 0.7 - 1.2 mm aggregate: 0.4 - 0.6 kg per m <sup>2</sup>						
	DP20: 1.2 - 1.8 mm aggregate: 0.7 - 0.9 kg per m <sup>2</sup>						
	DP30: 1.0 - 3.0 mm aggregate: 1.0 - 1.2 kg per m <sup>2</sup>						
Environmental Conditions	Air Temp+15°C to 25°CRelative air humidity<85%Dew Point>3°C above						
Substrate Temperature	+15°C to 25°C						
Substrate Moisture Content	No ponding water Substrate relative humidity (RH): <75% Concrete must have a tensile strength: >1.5 N/mm <sup>2</sup>						
Pot life (approx.)	+10°C 20 to 30 minutes   +20°C 15 to 20 minutes   +30°C 10 to 13 minutes						
Curing Schedule 20°C	Light Pedestrian TrafficAbove 12hoursLight Wheeled TrafficAbove 24 hoursHeavy Duty TrafficAbove 48 hoursFull Chemical Resistance7 days						

SERVICE CONDITIONS*					
Temperature Extremes:	Temperature	Conditions			
	+70°C	Spillages when applied at 6.0 mm			
	+120°C	Spillages when applied at 9.0 mm including steam cleaning			
	-25°C	When applied at 6.0 mm			
	-40°C	When applied at 9.0 mm			

\* Where thermal shock is likely it is essential that the substrate is of good quality concrete of the correct specification. For cold temperature the product must be fully cured before the freezer is activated and the temperature must not be reduced at a blast chill rate; preferably over a minimum of 12 hours.





TECHNICAL INFORMATION *					
Adhesive strength to concrete	BS EN 13892-8	>1.5 N/mm <sup>2</sup>			
Slip Resistance	Pendulum Test BS 7976-2	> 25 wet - (0.4 - 0.7 mm aggregate)			
		> 40 wet - (0.7 - 1.2 mm aggregate)			
		> 45 wet - (1.2 - 1.8 mm aggregate)			
		> 50 wet - (1.0 - 3.0 mm aggregate)			
FeRFA Floor Type	BS 8204-6	Туре 8			

\*The typical physical properties given above are derived from testing in a controlled laboratory environment. In the field results may vary due to site conditions.

#### **APPROVALS & STANDARDS**

#### Synthetic Resin Screed material according to EN 13813:2002

Pumadur DP is a non-tainting product in accordance with test method TES-S-002 performed by Camden Food Research

#### Eurofins Indoor Air Quality GOLD certified

Note: The information contained in this document, and all further technical advice is given based on our present knowledge and experience. However it implies no liability or legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application is beyond our control. Properties listed are for guidance purposed only. We reserve the right to make any changes according to technological progress or further developments.

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CE		13	DOP RV0082				
EN 13813 SR-B1,5 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations							
Reaction to fire: Release of corrosive substances : Water permeability: Wear resistance: Bond strength:	NPD SR NPD NPD B1,5		Impact resistance: Sound insulation: Sound absorption: Thermal resistance: Chemical resistance:	NPD NPD NPD NPD NPD			

