

# Product Data Sheet

## Starcoat PMMA Coloured Sealer (Fire Retardant)

**Starcoat PMMA Coloured Sealer (Fire Retardant) is used as a fire retardant wearing layer in Axter Starcoat PMMA systems.**

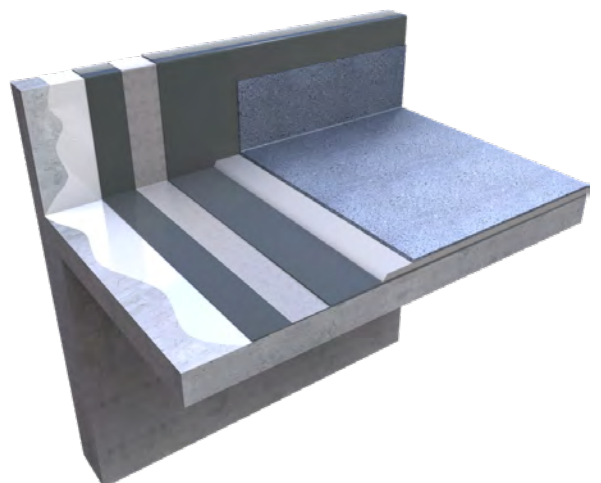
It is a high-grade, mechanically durable finish that can be supplied in a wide range of colours and can also be used for creating patterns or lettering. Various different toppings can be applied to achieve the desired slip-resistant properties.

### Materials

2-component, fast-reactive, pigmented PMMA-based (polymethyl-methacrylate) sealing resin.

### Key benefits

- Abrasion-resistant
- Easy and fast application
- Fast-curing
- Can be used in a variety of colours to create desired patterns, for example a tiled look or lettering. Available in RAL 7043 as standard; for other colours apply to Axter Ltd
- Various toppings can be applied (such as chips and sand) to create the required slip-resistant properties



- Classified as CR-s1 in system test (in accordance with DIN EN 13501-1)
- Permanently weather-resistant (UV, hydrolysis- and alkali-resistant)
- Chloride-resistant
- Solvent-free

## Areas of application

Starcoat PMMA Coloured Sealer (FR) is used to seal Starcoat PMMA systems. The surfaces of the system can be designed in any colour and pattern. The appropriate slip resistant properties are achieved by using different toppings.

## Packaging

Summer		Winter	
10.00 kg	Starcoat PMMA Coloured Sealer (FR)	10.00 kg	Starcoat PMMA Coloured Sealer (FR)
0.20 kg	Starcoat PMMA Catalyst (2 x 0.1 kg)	0.40 kg	Starcoat PMMA Catalyst (4 x 0.1 kg)
10.20 kg		10.40kg	

## Colours

Starcoat PMMA Coloured Sealer is available in RAL7043 as standard; the following are also available on request:

RAL 7030, Stone Grey; 7032 Pebble Grey; 7035 Light Grey; 7043 Traffic Grey

For additional colour choices, please contact Axter.

Due to production reasons, there may be some colour variation between individual batches and the available RAL colour charts.

## Storage

Products should be stored sealed in their original airtight container and in a cool, dry, frost-free place.

Unopened products have a shelf life of at least 6 months. Direct sunlight on the containers should be avoided, including on site. After removing some of the contents, reseal the containers so they are airtight.

## Application conditions

### Temperatures

The product can be applied within the following temperature ranges:

Product	Temperature range in °C		
	Air	Substrate*	Material
Starcoat PMMA Coloured Sealer (FR)	-5 to +35	+3 to + 40*	+3 to +30

\*the substrate temperature must be at least 3°C above the dew point during application and curing.

The substrate temperature must not be less than +3°C if a topping is applied to the surface. Reaction problems can occur at lower temperatures (See preparation for subsequent layers).

## Moisture

The relative humidity must be  $\leq 90\%$ . The surface to be coated must be dry and ice-free. The surface must be protected from moisture until the coating has hardened.

Reaction times and required amounts of catalyst	
	Starcoat PMMA Coloured Sealer (FR) (at 20°C, 2% Starcoat PMMA catalyst)
Pot life	approx. 15 minutes
Rain-proof after	approx. 45 minutes
Can be walked on / overcoated after	approx. 60 minutes
Curing time	approx. 3 hours

Higher temperatures or greater proportions of Starcoat PMMA Catalyst will reduce reaction times, while lower temperatures and smaller proportions of Starcoat PMMA Catalyst will increase reaction times.

The following table indicates the recommended amount of Starcoat PMMA Catalyst required to adjust the curing reaction to the temperature.

Product	Substrate temperature in °C / required amounts of Starcoat PMMA Catalyst in % (guide)											
% Starcoat PMMA Coloured Sealer (FR)	-5	+3	5	10	15	20	25	30	35	40	45	50
	-	3	3	3	1.5	1.5	1.5	1.5	0.5	0.5	-	-

## Consumption rates

**Substrate – smooth** Consumption 0.70kg/m<sup>2</sup>

**Topped areas (depending on particle size)** Consumption 0.80 – 0.90kg/m<sup>2</sup>

## Technical data

**Density** 1.20 to 1.30 g/cm<sup>3</sup>

The density will vary with the colour.

## Application

### Application equipment/tools

**For mixing product:** Twin paddle stirrer

**For applying the product:** Finishing roller (sheepskin roller, minimal shedding)  
Rubber blade, hard (for applying finish to topped surfaces)

**Substrate preparation** The finish can be applied either to the hardened Starcoat PMMA primer, or the PMMA self-levelling mortar, as required.

**Mixing**

First stir the tub contents thoroughly, then add the Starcoat PMMA catalyst while stirring the resin at the slow-speed setting and mix for 2 minutes. Make sure that the product on the base and sides of the container is well mixed in. At product temperatures <math><10^{\circ}\text{C}</math> the product should be stirred for 4 minutes as the Starcoat PMMA Catalyst will take longer to dissolve.

**Application**

Use the finish layer to apply an even coat of the mixed material (approx.  $0.7 \text{ kg/m}^2$ ). Avoid fluctuating layer thicknesses.

**Finish design options**

Increased slip resistant properties:

Top the freshly applied, still liquid finish with dry quartz sand (e.g. Starcoat PMMA Quartz Aggregate). Particle sizes of between 0.2-0.6 mm or 0.7 and 1.2mm can be used, depending on the desired roughness.

Vacuum off the loose sand once the finish has hardened and then apply a final coat of finish with a sheepskin roller to cover the entire area. For an enhanced appearance the first coat of finish can also be applied using a hard rubber blade and smoothed over with the finish roller depending on the particle size of the topping (approx.  $0.60 - 0.80 \text{ kg/m}^2$ ).

Finish design using Starcoat PMMA Decorative Chips:

Use a hopper gun to apply Starcoat PMMA Decorative Chips to the freshly applied finish while it is still wet. A maximum of  $50\text{g/m}^2$  can be applied, depending on the look to be achieved. There should be no excess Chips at any point (surface completely covered with Chips). This could result in reaction problems.

**Cleaning**

If work is interrupted or when it is completed, clean the tools thoroughly with Starcoat PMMA Cleaner within the pot life of the product (approx. 10 minutes). This can be done with a brush. Do not use the tools again until the Starcoat PMMA Cleaner has fully evaporated.

Simply immersing the tools in the Cleaner will not prevent the material from hardening.

**Safety and risks**

Please refer to the Safety Data Sheets for the products used.

**General information**

The above information, especially information about application of the products, is based on extensive development work and is provided to the best of our knowledge. However, the wide variety of requirements and conditions on site mean that it is necessary for the product to be tested to ensure that it is suitable for the intended purpose. Only the most recent version of the document is valid. We reserve the right to make changes to reflect advances in technology or improvements to our products. Axter Ltd makes no warranties, express or implied, as to the properties and performance under any variations from such conditions in actual construction.