



Flowfast 107 Ceramic-Metal Primer / Duracon 107

Product Description

Flowfast 107 Ceramic-Metal Primer is a low viscosity, colourless, 2 component reactive resin based on methyl methacrylate (MMA).

Features and key benefits

-) Exhibits excellent adhesion to metal and ceramic tile substrates.
-) Provides good adhesion to subsequent coats
-) Easy to apply
-) Fast and safe curing even at low temperatures

Product Information

Applications

Flowfast 107 Ceramic-Metal Primer is used as primer to give excellent bonding to metal substrates (e.g. iron, aluminium, stainless steel) and to ceramic tile substrates.

We strongly recommend with all Flowfast primers that curing and adhesion tests are conducted on the substrate prior to general use on site.

Certificates and approvals

CE according to EN 13813 and 1504-2 (when used as part of complete system)

Environment and health

Suitable protective clothing, gloves and safety goggles must be worn during mixing and application of Flowfast 107 Ceramic-Metal Primer.

In case of contact with eyes, rinse immediately for a long period of time and seek medical advice.

In case of contact with skin, clean immediately with water and soap.

Flowfast 107 Ceramic-Metal Primer is highly flammable; keep away from heat and all sources of ignition and do not smoke. The stirrer as well as all the other electric appliances used on the application site must be explosion-proof versions.

Safety Data Sheet must be read and understood before use.

Technical Information

Technical Characteristics (liquid state)

Viscosity, 25 °C: (DIN 53019)	Approx 90-140 mPa·s
Density, 23 °C: (ISO 1183)	1.0 kg/l
Pot life / processing time at 20 °C:	approx. 15 min
Curing time at 20 °C:	approx. 60 min
Flash point: (ISO 1516)	+ 11.5 °C

Technical Characteristics (cured state)

Tensile strength at RT: (EN ISO 527)	5.48 N/mm ²
Elongation at maximum strength at RT (EN ISO 527):	0.64 %
Elongation at fracture at RT (EN ISO 527):	0.64 %
Modulus of elasticity:	497 N/mm ²
Density, 20 °C: (ISO 1183)	1.1 g/cm ³

*Please note that an objective comparison with other data is only possible if norms and parameters are identical.

Packaging

180 kg steel drums, 20 kg metal pails.

Storage

Store in a cool and dry place and in originally closed packaging. The optimal storage temperature is 15 - 20 °C. Maximum storage temperature is 30°C
Protect from weather and moisture / contaminant ingress.

Shelf Life

12 months in unopened pack.

The date of manufacture is given on the label in the format xxxxxx-140708C3, where the date is 2014 July 8th. xxxxxx and C3 are internal code

Usage Guidelines

Application Conditions

Ambient temperature range:	0°C - +35°C
Substrate temperature range:	0°C - +35°C
Ambient relative humidity:	<95%
Substrate relative humidity (for primers)	<5.5% (TRAMEX scale or 92% RH BS 8203)

-) The substrate temperature should always be at least 3°C above the dew point temperature.
-) In closed rooms a forced ventilation with at least 7-fold air exchange per hour is recommended.

To assess possibility of application outside of these conditions or application temperatures below 0°C, please consult our Technical Department.

Substrate Preparation

Assumes a concrete base with a minimum 25 N/mm² compressive strength and 1.5 N/mm² tensile strength (latter as tested to EN 1542). Perform preliminary tests on critical and unknown surface. The product will also bond to metal (e.g. iron, aluminium, stainless steel) and ceramic tile substrates. The product is not suitable for non-ferrous heavy metals and zinc. Steel substrates must be prepared to SA 2.5 (to DIN 55929). Glazed surfaces must be removed from tiles before applying the primer (e.g. by diamond grinding or shot blasting). Loose tiles and tiles over hollows must be removed. All substrates must be dry, firm, solid and free of dust, fat and oil

For further details, see our “General Preparation and application guidelines for Flowfast floor protection systems”.

Mixing

Prior to use, Flowfast 107 Ceramic-Metal Primer must be carefully stirred to achieve a uniform distribution of paraffin contained in the product.

Flowfast 107 Ceramic-Metal Primer is thoroughly mixed with the Catalyst (C2) (50 % dibenzoyl peroxide), in accordance with the following guidelines.

It should be noted that the amount of Catalyst (C2) powder to be added depends upon the application temperature.

Guidelines for Catalyst (C2) addition to Flowfast 107 Ceramic-Metal Primer		
Temperature	Weight percentage Catalyst (C2)	Gram Catalyst (C2) per 20 kg

30 °C	1.0 %	200 g
20 °C	2.0 %	400 g
10 °C	4.0 %	800 g
0 °C	6.0 %	1200 g
< 0 °C	6.0 %	1200 g

Remark:

The optimal product temperature is 15 – 20 °C.

At temperatures below 0 °C, the accelerator Flowfast 404 Accelerator should also be added.

For further information contact our Technical Department.

Conversion:

1 cm³ of Catalyst (C2) = 0.64 g

1 g of Catalyst (C2) = 1.57 cm³

Add the required amount of Catalyst (C2) to the resin and additive mix. Mix with slow speed drill and helical spinner, taking care not to entrain air.

Application

After the Catalyst (C2) has been stirred in, the primer is poured onto the substrate in stripes and distributed with a short-pile paint roller. A notched rubber squeegee can be used for fast distribution of large quantities. Apply at a rate of between 300 gr/m² to 500 gr/m² depending on density and porosity of the substrate. In any case, continue applying primer until saturation occurs to obtain a continuous resin film. On porous substrates a second prime coat may be required. When a continuous resin film is obtained, broadcast fire-dried quartz sand (particle size 0.3 – 0.7 or 0.7 - 1.2 mm) into the still wet primer. Consumption of quartz is approximately 0.3 kg/m². For further details see our “General Preparation and application guidelines for Flowfast floor protection systems”.

When applying thin section coatings to the primer, no quartz scatter is required. However, the coatings must be applied to the primer within 4-6 hours to prevent adhesions problems.

Coverage

Approximately 0.3 - 0.5 kg/m²

Curing

Can be walked on after 1 hour at 20°C. Fully chemical cure after 2-3 days.

Cleaning



Clean tools with Flowfast 405 Cleaner or solvents (MEK, acetone) immediately after application, cured remains can be removed only by mechanical means

Technical Service

Contact Tremco CPG (Country)

Guarantee

Tremco CPG (Country) warrants all goods to be free from defects and will replace materials proven to be defective but makes no warranty as to appearance of colour. The information and recommendations herein are believed by Tremco CPG (Country) to be accurate and reliable.

CE-certification – see the declaration of performance (DoP) for details