

# vebro MMA Flex Seal (Clear Silk)

(Hardened with **vebro** MMA Catalyst)

**vebro** MMA Flex Seal (Clear Silk) is a low viscosity, solvent-free and transparent elasticised methyl-methacrylate sealer,

**vebro** MMA Flex Seal (Clear Silk) is mixed with a dry powder catalyst, such as **vebro** MMA Catalyst, to trigger a reaction, which rapidly hardens the material.

**vebro** MMA Flex Seal (Clear Silk) is typically used in flooring applications (wet process areas) to seal decorative systems, offering enhanced durability, strength, chemical and UV resistance.

**vebro** MMA Flex Seal (Clear Silk) is characterised by a blue tint that fades upon cure. Alternatively, **vebro** MMA Flex Seal (Clear Silk) can be pigmented if required.

| Component   | Small   | Bulk     |
|---|---------|----------|
| <b>vebro</b> MMA Flex Seal (Clear Silk)             | 25.0 kg | 180.0 kg |
| <b>Total Unit:</b> <b>25.0 kg*</b> <b>180.0 kg*</b> |         |          |

\*See Catalyst Addition table for recommended hardener dosage.

- ✓ Excellent UV stability - non-yellowing
- ✓ Excellent chemical and scratch resistance
- ✓ Designed for wet process areas
- ✓ Bulk units available

## Density

0.98 kg / ltr

## Unit Weight

25.0 kg (~25 ltr)

## Flash Point

+10°C

## HS Code

2916142020

## Consumption

The recommended consumption of **vebro** MMA Flex Seal (Clear Silk) is 0.40 kg/m<sup>2</sup>.

A second top coat can be rolled on at 0.30 kg/m<sup>2</sup> once the first coat is fully dry if required.

If the coating thickness is exceeded (more than 0.80 kg/m<sup>2</sup>), the surface may flake and yellow. If the thickness is too low, excessively high monomer loss may occur, leading to insufficient hardness or lower resistance.

## Working Time

**~12 minutes** @ 20°C (usable working life of material following mixing and immediate spreading as per the application instructions).

## Speed of Cure

- Light Foot Traffic – 30 minutes
- Full Chemical Cure – 2 hours

## Application Temperature

**~5 – 30°C** is recommended. Outside of this range, heating or cooling equipment should be used to achieve ambient conditions.

## Storage & Shelf Life

All components should be stored off the ground, in a cool dry area, away from direct sunlight between 10 – 30°C. Materials will keep for 6 months in the closed original container and provided the above storage conditions have been met.

\*These coverages are theoretical and may vary due to a number of factors including the condition of the substrate. It is the applicator's responsibility to ensure the substrate has been surveyed and tested. A recommended 5% wastage addition is advised on all orders.

## Pigments

The pigments used for to colour MMA materials are typically inorganic. They are stirred into the resin together with any fillers prior to adding the **vebro** MMA Catalyst.

You must ensure that the dispersant contains no lumps. This applies particularly for mixtures which do not contain sand as coarse particles, such as top coats.

The quantity of pigment to add depends on the type of pigment and the desired coat thickness. 2.0 – 5.0% is adequate for coatings above 2.0 mm. On the other hand, at least 10.0% pigment is required for thin roll-on formulations such as line markers applied at less than 0.5 mm, or 5.0 – 10.0% for coating installed in a two-coat application.

**vebro** MMA Pigment packs can be supplied in many standard RAL shades and sizes.

Carbon black is not suitable as a black pigment, as it leads to hardening problems. The same applies for grey shades which contain black pigment alongside titanium dioxide as the white pigment.

We advise not to use untested pigments, as these may lead to incompatibility with the resins and ultimately curing problems.

## Substrate Requirements

The surface must exhibit a minimum compressive strength of 25 N/mm<sup>2</sup> and an adhesive strength of 1.5 N/mm<sup>2</sup>. The surface must be clean and free of dust and loose particles. All traces of contaminants, including oils, fats, grease, paint, chemical and laitance should be removed. Any cracks or damage should be properly remedied prior to application.

## Application Instructions

### Application Temperature

Prior to application, the material should be heated to an ambient temperature (air and floor temperature).

### Mixing

Add the required amount of **vebro** MMA Catalyst to the resin component and mix for two minutes. Use a slow speed drill and helical spinner, taking care not to entrain air.

The necessary quantity of **vebro** MMA Catalyst must be adjusted in light of the temperature of the surface. For the exact quantities, please refer to the table below:

### Catalyst Addition

| Temperature | Catalyst | Pot Life | Curing Time |
|-------------|----------|----------|-------------|
| -5 °C       | 5.0%     | 25 mins  | 60 mins     |
| 0 °C        | 4.0%     | 17 mins  | 40 mins     |
| +10 °C      | 3.0%     | 15 mins  | 30 mins     |
| +20 °C      | 2.0%     | 15 mins  | 30 mins     |
| +30 °C      | 1.0%     | 8 mins   | 15 mins     |

You must not dose less than the given quantity of **vebro** MMA Catalyst, as this will adversely affect the curing process.

You must also avoid overdosing the **vebro** MMA Catalyst, as this can likewise lead to serious curing problems.

If the pot life, within which good penetration of the substrate is guaranteed, is to be observed, appropriate batch quantities should be estimated. The material must be applied as soon as the **vebro** MMA Catalyst has completed dissolving within the resin components.

### Application

**vebro** MMA Flex Seal (Clear Silk) is immediately poured onto the surface and applied crosswise, preferably by means of a paint roller. Although it is possible to spread it roughly with a rubber blade first, the dwell time of the still liquid resin until final levelling on a coloured flake surface must not be too long, as this may partly dissolve and leave colour tracks behind.

To ensure the best possible properties, the minimum and maximum coating thickness must be observed. Material consumption for smooth coatings is approx. 0.40 kg/m<sup>2</sup> per application and on broadcast areas approx. 0.50 kg/m<sup>2</sup>. If the coating thickness is exceeded (more than 800 g/m<sup>2</sup>), the resin will tend to flake and yellow. If the thickness is too low, excessively high monomer loss may occur, leading to insufficient hardness or lower resistance.



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|                            |   |  |       |
|----------------------------|---|--|-------|
| <b>Supplied by:</b>        | <b>Vebro Polymers UK Limited,</b><br>Argyle House, Stanley Green Trading Estate, Epsom Avenue, Handforth, Wilmslow, Cheshire, SK9 3RN, United Kingdom |  |       |
| <b>Harmonised Standard</b> | EN 13813:2002 (System 4)  |  |       |
| <b>Intended Use:</b>       | Synthetic resin screed materials for use internal use   |  |       |
| <b>Reaction to Fire</b>    | E <sub>fl</sub> *   | <b>Release of Corrosive Substances</b> | SR    |
| <b>Wear Resistance</b>     | AR1   | <b>Bond Strength</b>                   | >B1.5 |

\*Improved results of B<sub>fl</sub>, C<sub>d</sub> are achieved when tested as part of the completed system.

## Further Information

Information relating to the safe handling of this product can be found in the Material Safety Data Sheet. Local regulations concerning the safe handling of resin based coating materials must be observed. Suitable protective clothing including suitable eye protection must be worn at all times.

All consumptions listed are for recommendation purposes only. Detailed application instructions and system build-up advice can be provided on request through our Technical Services team.

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