

vebro MMA Binder (Hardened with vebro MMA Catalyst)

vebro MMA Binder is a medium viscosity, solvent-free and transparent methyl-methacrylate binder.

vebro MMA Binder is mixed with a dry powder catalyst, such as vebro MMA Catalyst, to trigger a reaction, which rapidly hardens the material.

vebro MMA Binder is typically used in decorative

flooring applications, where it is used to bind coloured DK1 quartz aggregates.

Alternatively, vebro MMA Binder can be mixed with vebro MMA Filler and vebro MMA Pigment to create a body coat that can be blind broadcast with decorative PVA flakes.

In both instances, a minimum of two seal coats of vebro MMA Seal (Clear Silk) is recommended.

Component	Small	Bulk
vebro MMA Binder	25.0 kg	180.0 kg
Total Unit:	25.0 kg*	180.0 kg*

*See *Catalyst Addition* table for recommended hardener dosage.

- ✓ Can be laid from 2.0 – 7.0 mm with vebro MMA Filler
- ✓ Temperature resistant to 60°C
- ✓ Medium viscosity
- ✓ Bulk units available

Density

0.99 kg / ltr

Unit Weight

25.0 kg (~25 ltr)

Flash Point

+10°C

Coverage

Dependent on use. See *Mix Design* table for further information.

HS Code

2916142020

Consumption

The recommended consumption of the vebro MMA Binder mortar:

3.0 mm SL: 5.00 kg / m²

5.0 mm SL: 9.00 kg / m²

Quartz Binder: 2.00 kg / m²

See *Mix Design* table for further information.

Working Time

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

Overcoating Time

After 45 minutes @ 20°C

Speed of Cure

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

Application Temperature

~-10 – 25°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.

Mix Designs

Product	SL at 3.0 mm		SL at 5.0 mm		Quartz Binder	
vebro MMA Binder	33.0%	25.0 kg	28.0%	25.0 kg	22.0%	7.0 kg
vebro MMA Filler	65.0%	50.0 kg	70.0%	62.5 kg	n/a	
vebro MMA Pigment Pack	2.0%	2.0 kg	2.0%	2.5 kg	n/a	
vebro Natural Quartz / Coloured Quartz Blends (0.7 – 1.2 mm)	n/a		n/a		78.0%	25.0 kg
Av. consumption:	5.00 kg / m²		9.00 kg / m²		2.00 kg / m² (per mm thickness)	
vebro MMA Catalyst <i>(by weight of liquid content)</i>	2.0 – 6.0 %	0.50 – 1.50 kg	2.0 – 6.0 %	0.50 – 1.50 kg	2.0 – 6.0 %	0.13 – 1.50 kg

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.

Coloured Quartz Blends

Coloured quartz from other suppliers must be evaluated for resistance to MMA and water prior to use. Ensure that epoxy-coated sands do not contain amine hardeners as these may lead to curing problems when used in conjunction with MMA resins. This also applies to water-emulsifiable binders.

vebro Coloured Quartz Blends have been adequately tested and deemed suitable for use in clear bound decorative MMA quartz systems.

Substrate Requirements

The surface must exhibit a minimum compressive strength of 25 N/mm² and an adhesive strength of 1.5 N/mm². 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.

The substrate *MUST* be suitably primed with the appropriate MMA Priming material.

Application Instructions

Application Temperature

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

Mixing

Mix vebro MMA Binder along with any filler or pigment components as described above until the mixture is smooth, homogenous and there are no large lumps.

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:

vebro MMA Binder

(Hardened with **vebro** MMA Catalyst)



Catalyst Addition

Temperature	Catalyst	Pot Life	Curing Time
0 °C	6.0%	20 mins	60 mins
+10 °C	4.0%	20 mins	45 mins
+20 °C	3.0%	15 mins	30 mins
+30 °C	2.0%	10 mins	25 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 Binder is applied to the primed and loosely sanded surface and initially spread coarsely to the desired thickness by means of a doctor blade.

The mortar must then be compressed and smoothed using the large smoothing trowel so that no pores and trowel marks remain in the floor (danger of hardening problems). Since the smoothable coating does not flow by itself, it is particularly suitable for areas with higher inclinations.

The application of the system requires special skills and practice (the prevention of puddles, good compaction of the mortar) to avoid pores and air bubbles within the mentioned tolerance of fillers and resin with dependence on the thickness.

After hardening, a wearing topcoat must be applied.

When installing decorative quartz systems, allow the binder to fully cure before overcoating with **vebro** MMA Seal (Clear Silk).

Overcoating

Overcoating should be carried out within 24 hours of application. If longer than 24 hours it will be necessary to lightly grind the surface by mechanical means before overcoating is carried out.



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

**Improved results of B_f, C_f 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 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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