## VeroMetal<sup>®</sup> MouldProtect 150 Technical Data



**Description:** VeroMetal® MouldProtect 150 consist of 99% metal powder, a

proprietary hybrid polyester binder and hardener system.

Recommended use: VeroMetal<sup>®</sup> MouldProtect 150 can be applied to nearly every

surface.

**Type of Product:** 4 component Kit: Metal, Binder/Resin, Hardener, Cobalt.

Pack Size: 1 Kit VeroMetal® MouldProtect 150 consists of:

Part A Binder

Part B Cobalt (1% from weight of binder)

!ATTENTION!
Risk of reaction:

Part C Hardener (2% from weight of binder)

Part D Metal

Mixing ratio Metal to Binder is 3:1

Do not bring Cobalt (B) and Hardener-MEKP (C) into direct contact.

Shelf Life: Part A, B, C: 3 months

Part D Metal: 12 months

Both under dry conditions at 20° Celsius.

Physical Constants: Colour: grey

Finish: matt, satin polished, high polished

Weight % Non-Volatile: 65% ± 1

Theoretical spreading rate: 3 m²/kg - 100 micron

Flash point: 32°C 89°F

Dry to touch: 1 hour at 20°C/68°F

V.O.C: 260 g/litre TG Glasstransformingtemp.: 145°C

**APPLICATION DETAILS:** 

**Application method:** High Volume Low Pressure (HVLP),

Nozzle orifice: 1.1 to 1.6

Nozzle pressure: 1.1 to 1.5 bar/16 to 22 psi

(HVLP spray data is indicative and subject to adjustment)

Roller (solvent resistant foam)

Casting, Moulding

Cleaning of tools: Acetone

Indicated film thickness, dry: approx. 140 micron

Indicated film thickness, wet: approx. 160 micron

Safety: Handle with care. Before and during use, observe all safety labels on

packaging and containers, consult VeroMetal Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.

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Risk of reaction:

into direct contact.

Do not bring Cobalt (B)

and Hardener-MEKP (C)



Surface Preparation: For application on negative mould: Remove possible oil and

grease etc. with suitable detergent. Remove any possible weak or flaking structure of old coating. Allow the surface to be completely dry before coating. Sand the surface with a course grit paper like 100 grit

or less with a dual action sander.

For application directly on the plug (master model): no sanding necessary. Important: After using a release agent the surface must be

wiped off with a dry, smooth cloth.

Risk of reaction: Do not bring Cobalt (B) and Hardener-MEKP (C) into direct

contact.

**Application Conditions:** The surface must be completely clean and dry at the time of

application and its temperature must be 5 points above the dew point

to avoid condensation.

1. Open Pack A (Binder)

2. Stir the Binder thoroughly

3. Open Pack B (Cobalt) and add into Pack A (Binder) (2% weight of binder weight) and stir slowly and thoroughly to make a smooth, even-textured mixture free of clumping.

Open Pack C (MEKP-Hardener) and add into mixture.
 (2% weight of binder). Stir slowly and thoroughly to make a smooth, even-textured mixture free of clumping.

Open Pack D (Metal) and add into mixture. Stir with a flat stirring stick for at least 30 seconds, making sure to reach the sides and bottom of the container.

Mixing ratio Metal to Binder is 3:1

Thorough mixing during both mixing steps is essential for even curing and spraying/rollering.

Once you added the Cobalt (Pack B) you have approximately a 60 minute pot life at 20 degrees C°.

Spraying is the best way to apply the product. But also casting/moulding or rollering is possible. When using spray application, use a 50% overlap with each pass of the gun to avoid dry areas, and pinholes. If necessary, cross spray at a right angle. Do not mix previously catalysed material with new. In order to avoid blockage of spray equipment, clean equipment before use or before

periods of extended down-time with acetone.

**Curing:** The coated product needs at least 72 hours curing at minimum

20°Celsius and maximum 35°Celsius. Then building of the mould can

be continued. For optimum curing a post curing at 70°C is

recommended.

**Remarks:** This product contains heavy particles. Stir well before use.

Please stir very well before application to get a homogenous mixture.

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The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the product information without notice. All statements, information and data provided in this document are based upon data obtained from recognized technical sources and are believed to be accurate and reliable but are presented without guarantee, warranty or responsibility of any kind, expressed or implied. VeroMetal GmbH expressly disclaims all expressed or implied warranties of marketability and fitness for a particular purpose with respect to the product or the information contained herein. Users should make their own investigations to determine the accuracy and suitability of the information, specifications, technical data or products for their particular purpose(s).

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