

BÜFA® -VE-Tooling-Gelcoat-S black

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BÜFA®-VE-Tooling-Gelcoat-S black is a pigmented, pre-accelerated gelcoat with spray consistency. It is based on epoxy bisphenol A-vinyl ester urethane resin dissolved in styrene.

Profile

Product type	Gelcoat
Processing method	Spray quality
System	Tooling
Pre-accelerated product	Yes
Resin base	Vinylester (VE)
Production method	Tinting manufacturing
Colour	black
Odour	like styrene

Application Range

BÜFA®-VE-Tooling-Gelcoat-S black has been developed specifically for the manufacture of GFRP moulds. The product is particularly suitable for the manufacture of moulds that are exposed to high chemical and thermal stress.

Specification / Technical Data

Density (BM D01) approx.	1,2 g/mL
Flashpoint (BPV FP 02) approx.	32°C
Styrene content approx.	35.3 %
Viscosity (BM V01)	30,000 - 36,000 mPas

Viskosität bei 25°C mit Spindel 4 und 2 U/min	
Viscosity (BM V01)	4,000 - 5,500 mPas
Viskosität bei 25°C mit Spindel 4 und 20 U/min	

The BÜFA testing standards define the testing scenario after the values are determined in our facilities. They relate to generally accepted standards and are available under request.

Curing

The specification data for reactivity and viscosity relate to the pre-product used.

Reactivity	BM R01
Sample size	100g sample
Peroxide addition	2.0 Vol% Curox M-303
Geltime (Reactivity 25°C-35°C)	11 - 13 min
T-Max (Reactivity Tmax at 25°C)	175 - 195 °C

ATTENTION! The above information refers exclusively to the use of the peroxides mentioned here in the indicated dosage. If other products are used or if the dosage differs, the results may vary.

BÜFA®-VE-Tooling-Gelcoat-S black can be cured with standard methyl ethyl ketone peroxides without worrying about the foaming typical for normal vinyl ester resins.

The base products used in the tinting process were checked for their product quality (according to specifications) within the scope of quality control. The pigmented gelcoats produced in the tinting process are not subjected to any further testing.

We recommend post-curing (tempering) the component for several hours at 80°C, as this is the only way to achieve the optimum mold material properties.

This achieves optimum gelcoat properties.

Processing

The gelcoat should be stirred gently before processing.

Before applying the release agent, it is essential to ensure that the surface finish of the model is completely hardened. For the separation, we recommend applying 6-7 layers of BF 700 Carnauba Wax. Between each waxing, the release coatings must be allowed to dry for at least 1 hour.

The completely released model should ideally be stored overnight before the start of mould construction. To ensure reliable release, the release wax should be tested in advance on a separate sheet.

Optimum results are achieved by observing the following instructions: The wet film thickness of the product should ideally be between 700 - 900 µm in the liquid state and should not fall below a film thickness of 900 µm wet.

The fine layer should be applied in 3 - 4 coats to ensure optimal de-airing. A de-airing time of 3 mins. should be observed between sprayings.

This gelcoat can be processed with appropriate application systems from the BÜFA®-Tec range.

ATTENTION! Use only dried and de-oiled compressed air!

For processing and curing, the instructions in our "Working with BÜFA®-Gelcoats" technical information leaflet must also be observed.

It is recommended that moulds should be suitably protected while not in use, especially when stored outside. This will prevent accidental scratches or changes to the original cosmetics due to extended water or sunlight exposure. It is common to store moulds protected with an application of standard gel coat and one layer of standard CSM GRP for easy removal. Alternatively, proprietary peel able coatings may be used after first checking they do not contain aggressive solvents and then testing on a non critical mould.

Colouring

Storage and handling

As a result of the wide range of factors which may influence the operating conditions and the application of the product, the user must still carry out their own tests and trials.

The product must be kept closed, cool, dry and protected from sunlight.

Higher temperatures reduce storage life.

The setting and curing times as well as the viscosities may vary with longer storage periods.

In unopened and undamaged original containers, at storage temperatures of up to 20 °C the product can be used for at least 3 months.

The above details have been compiled to the best of our knowledge and are based on our current knowledge and experience. These details only constitute product descriptions. Under no circumstances do they constitute guarantees relating to quality or durability. The processor is obliged to carry out their own tests and investigations in order to take responsibility for any processing and application of our products in the processor's application area. The latest version of the corresponding EU safety data sheet must also be observed.