

BÜFA® -Conductive-Tooling GC-S black

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BÜFA®-Conductive-Tooling GC-S black is a sprayable, pre-accelerated tooling gelcoat with conductive properties. The resin base is a vinyl ester urethane resin based on bisphenol A dissolved in styrene.

Profile

Product family	BÜFA®-Conductive-Tooling
Product type	Gelcoat
Processing method	Spray quality
System	CON-T
Pre-accelerated product	Yes
Resin base	Vinyl ester - urethane (VEU)
Production method	Tinting production
Colour	black
Odour	like styrene

Application Range

BÜFA®-Conductive-Tooling GC-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. The gelcoat is also conductive. Appropriate grounding can counteract electrostatic charging of the component.

Specification / Technical Data

Density (BM D01) approx.	1,09 g/mL
Flashpoint (BPV FP 02) approx.	33.5°C

Styrene content approx.	43,60 %
Viscosity (BM V01) Viscosity at 20°C with spindle 4 and 4 rpm	22,000 - 34,000 mPas

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	Curox M-303 2,0 vol%
Geltime (Reactivity 20-30°C)	10 - 15 min
Curing time (Reactivity 20°C-Tmax)	25 - 35 min
T-Max (Reactivity Tmax at 20°C)	180 - 210 °C

ATTENTION! The above data refer exclusively to the use of the reactants mentioned here in the specified dosage. When using other products and also with deviating dosage, the results may be different.

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.

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

In order to optimise the moulding material properties, we recommend post-curing (tempering) the component for several hours at 80 °C. This achieves the optimal gelcoat properties.

Processing

Before applying the release agent, it must be ensured that the surface finish of the model is completely cured. For release, we recommend the application of 6-7 layers of BF 700 Carnauba wax. Between these individual wax applications, the release layers 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.

Optimal results are achieved by following the instructions below: The wet film thickness of the product in liquid state should ideally range between 700 - 900 µm and should not be less than 900 µm when wet.

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.

Other information

The gelcoat should be stirred gently before processing.

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 stored closed, in a cool, dry place and protected from sunlight.

In unopened, original containers, the product can be processed for at least 3 months if properly stored at up to 20 °C.

Higher temperatures reduce storage life.

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

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.