

BÜFA®-Resin VE 6520 RTM

Art.-No. 7006520

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BÜFA®-Resin VE 6520 RTM is a filled and pre-accelerated resin system with reduced monomer content, based on a vinyl ester resin and low profile additive, dissolved in styrene. BÜFA®-Resin VE 6520 RTM has medium reactivity and low viscosity. It cures with almost no shrinkage when used properly.

Profile

Product type	Resin
Procedure	closed
Procedure assignment	RTM - Process, RTM-light - Process
Product properties	Class A - Surfaces
Pre-accelerated product	Yes
Colour	light blue
Odour	like styrene

Application Range

BÜFA®-Resin VE 6520 RTM is used for the production of RTM components that are exposed to strong mechanical and thermal stress. The very good through-curing in thin layers, in combination with reduced exotherm in higher layer thicknesses, as well as the dimensional stability of the system make BÜFA®-Resin VE 6520 RTM an ideal resin for components with the highest surface quality requirements.

Specification / Technical Data

Density (BM D01) approx.	1.31 g/mL
Flashpoint (BPV FP 02) approx.	33.5°C
Styrene content approx.	34.0 %
Viscosity (BM V01) Viscosity at 20°C with spindle 2 and 50 rpm	450 - 500 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

Reactivity	BM R01
Sample size	100g sample
Peroxide addition	2.0 vol% Curox M-102
Geltime (Reactivity 20-30°C)	30 - 40 min
Curing time (Reactivity 20°C-Tmax)	50 - 65 min
Tmax (Reactivity Tmax at 20°C)	125 - 155 °C

To optimize the molding material properties, we recommend post-curing (tempering) the component for several hours at 80 °C.

If shorter processing times are possible and shorter demolding times are desired, the resin 7006520 can be post-accelerated with cobalt accelerators such as 7421062 BÜFA®-Accelerator Co 1 as required. For larger quantities of resin to be modified, the use of highly concentrated Co. accelerators is recommended. Here, an appropriate conversion of the concentrations is necessary. As a guide, here are some guide formulations which were measured on 100 g sample according to our BÜFA method based on DIN 16945 6.2.2.1. The stated gel time corresponds approximately to the processing time. Please contact us!

BÜFA®-Resin VE 6520 RTM excludes the use of standard MEKPs such as Curox M-303, Butanox M-50, etc. These peroxides lead to a partial decomposition of the peroxide in the form of gas bubbles, which cause porosity in the RTM component. The use of acetylacetone peroxide (AAP) such as Curox A-300, Trigonox 44 B etc., even in low concentrations (e.g. due to cross-contamination), leads to a significantly longer reaction time. A clear recommendation is the exclusive use of the peroxide Curox M-102 within the limits of 1.5 to 2 vol%.

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.

Processing

The resin should be stirred gently before use.

Before use, the resin should be brought to temperatures suitable for processing – i.e. to at least 20 °C. Otherwise, both the viscosity (and thus the impregnation properties) and the curing are negatively influenced.

For processing, we recommend the combination with continuous mats as well as the so-called core glasses, which are particularly suitable for avoiding a filtration effect of the fillers due to their high permeability. If the use of fabrics or scrims is required, our product 7000911 BÜFA®-Resin VE 0911 RTM may be the suitable product.

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.

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 inspection and assurance of the product quality (goods which meet the specifications) take place within the framework of quality control immediately after the product has been manufactured.

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

Technical Data Sheet //

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.