BÜFA®-Firestop-Gelcoat-S 320-S-A-BF-07135-light grey

ATTENTION! This is a current test product.

Art.-No. x160811

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BÜFA®-Firestop-Gelcoat-S 320 is a pre-accelerated, pigmented gelcoat in a sprayable consistency. It is free of styrene, melamine and halogens and is based on a vinylester resin dissolved in vinyl toluene. Thanks to a precisely coordinated combination of special flame retardant additives, this gelcoat achieves outstanding fire protection properties. BÜFA®-Firestop S 320 is a gelcoat that reliably protects the UP resin behind the laminate from flames.

Profile

Product family	GC-FIRE-S 320
Product type	Gelcoat
Processing method	Spray quality
Resin base	Vinylester (VE)
BF-Number	BF-07135

Application Range

The applications are mainly in the construction of rail vehicles. Other objects require prior clarification in individual cases. We recommend a suitable protective coating in consultation with our application technology department.

Specification / Technical Data

Density (BM D01) approx.	1.32 g/mL
Flashpoint (BPV FP 02) approx.	65°C
Styrene content approx.	0.0 %
Viscosity (BM V01) **Viscosity at 20°C with spindle 5 and 20 rpm**	8,500 - 10,000 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

Reactivity	BM R01
Sample size	100g sample
Peroxide addition	2.0 vol% Curox M-303
Geltime (Reactivity 20-30°C)	13 - 16 min
Curing time (Reactivity 20°C-Tmax)	25 - 35 min
T-Max (Reactivity Tmax at 20°C)	95 - 120 °C

ATTENTION: The information applies only to the use of the specific reactants in the specified dosage. Other products and dosages may lead to deviating results.

BÜFA®-Firestop-Gelcoat-S 320-S-A-BF-07135-I-light grey can be cured with commercially available ketone peroxides.

2xx- Batch manufacturing: Verification of product quality after production by quality assurance.

3xx- InPlant and 4xx- Tinting production: Base products checked for product quality, pigmented topcoat resins without further checking.

Post-curing at 60 °C is recommended to optimize the properties of the moulding material. Excessive post-curing can affect the color of the gelcoat.

Processing

The gelcoat should be stirred gently before processing.
For processing and curing, the instructions in the technical information sheet "BÜFA®-Firestop-Gelcoat-S 320-S-A" must also be observed.
The BÜFA release agent system Chemlease 41-90 EZ has been tested and successfully used for this gelcoat.
Other release agents should first be tested for their usability under practical conditions.
The optimum wet film thickness is between 500 - 900 µm (depending on the required fire protection standard)
Ideally, apply the material in layers of 200 - 300 µm crosswise and allow the air to escape for at least 30 s in between.
The gelcoat can be laminated over after approx. 90 minutes. To ensure a perfect bond, lamination work must be carried out after 24 hours at the latest.
This gelcoat can be processed with appropriate application systems from the BÜFA®-Tec range.
ATTENTION! Use only dried and de-oiled compressed air!
When using a Polycon spray gun, nozzle no. 9 should be selected at an air pressure of approx. 4 bar.

Orientation for fire testing

Orienting fire tests are based on laminates from controlled laboratory conditions and do not replace component testing by the manufacturer.

The thickness of the laminate and its overall structure (including face layers, varnishes, applications, sandwich inserts, etc.) influence the fire behavior. A high level of fire protection may result in restrictions in gloss level and surface quality. Individual component tests are mandatory for most applications and are the responsibility of the manufacturer.

Recommendation: Combination of BÜFA®-Firestop gelcoats with BÜFA®-Firestop resins for optimum use of synergies.

Optimum coating of the BÜFA®-Firestop gelcoat is best achieved with a solvent-based EP primer to seal the gelcoat. This prevents contact with water.

The gelcoated component must not be exposed to direct weathering and should only be stored under a roof. The component must be dried again before painting.

Individual component testing is mandatory for most applications and is the responsibility of the manufacturer.

Orienting fire tests are based on laminates from controlled laboratory conditions and do not replace component testing by the manufacturer.

Colouring

In order to achieve the good fire protection properties, a high level of fire protection agent is necessary, therefore colour stability is not possible. The gelcoat tends to change colour within a short time, which generally makes painting necessary for visible surfaces.
Optimum coating of the BÜFA®-Firestop gelcoat is best achieved with a solvent-based EP primer to seal the gelcoat. This prevents contact with water.

Test product

ATTENTION - This product is a test product and its composition and specification may be changed at any time without prior notice. Please direct any queries in this context to our application technology department.

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.
Higher temperatures reduce storage life.
Frost must be avoided.
The setting and curing times as well as the viscosities may vary with longer storage periods.
Sedimentation of the fillers can be observed with increasing storage time.

In unopened and undamaged original containers, at storage temperatures of up to 25°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.