BÜFA®-Firestop GC S 270-S/NV grey BF-70035-E

Art.-No. 7142702

Status: 3/14/2024

BÜFA®-Firestop GC S 270-S/NV grey BF-70035-E Attention - This gelcoat is not pre-accelerated!

Profile

Product family	S 270
Product type	Gelcoat
Processing method	Spray quality
System	FIRESTOP
Pre-accelerated product	ATTENTION! This product is not pre-accelerated!
Production method	Batch manufacturing
Colour	grey
BF-Number	BF-70035-E
Odour	characteristic

Application Range

BÜFA®-Firestop GC S 270 gelcoats are suitable for molded parts under high stress in interior and exterior applications, such as facade panels, fire protection and ship doors, rail vehicles, etc. Other objects require preliminary clarification. A protective coating is recommended in consultation with the application technology department.

Specification / Technical Data

Density (BM D01) approx.	1.33 g/mL
Flashpoint (BPV FP 02) approx.	30°C

Styrene content approx.	7.6 %
Viscosity (BM V01) **Viscosity at 20°C with spindle 5 and 5 rpm**	25,000 - 32,000 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

CAUTION! Peroxides must never be brought into direct contact with accelerators (risk of explosion)!
The accelerator containers should be shaken or stirred before use to avoid settling of components.
Mix the accelerator with the resin thoroughly first and only then add peroxide!

Reactivity	BM R01
Sample size	100g sample
Accelerator addition	1.0 wt% 742-1399
Peroxide addition	2.0 wt% Curox M-102
Geltime (Reactivity 20-30°C)	9 - 15 min
Curing time (Reactivity 20°C-Tmax)	22 - 27 min
T-Max (Reactivity Tmax at 20°C)	100 - 112 °C

ATTENTION: The data are only valid for the use of the specific reactants in the indicated dosage. Other products and dosages may lead to deviating results.

The required final properties of BÜFA®-Firestop Gelcoats are achieved only with the use of the recommended quantity of BÜFA®- Accelerator Complex 0399.
The accelerator dosing of 1.5 vol.% must be kept constant at all times.

BÜFA®-Firestop GC S 270-S/NV grey BF-70035-E can be cured with commercially available ketone peroxides.

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.

In order to achieve the optimum mechanical and fire protection properties, the moulded parts are to be post-cured for at least 6 hours at + 80°C. This achieves the optimal gelcoat properties.

Processing

The gelcoat should be stirred gently before processing.
For processing and curing, the instructions in our "Working with BÜFA®-Gelcoats" technical information leaflet must also be observed.
So far, the BÜFA release agent system Chemlease 2196 W has been tested and used successfully for this gelcoat.
Other release agents should first be tested for their usability under practical conditions.
Optimum results are achieved with a wet film thickness of 800-1000 µm, 800 µm should not be undercut.
After approx. 60 minutes, the laminate can be applied with a perfect bond. For waiting times longer than 8 hours, a pre-test is required and the processor bears full responsibility.
This gelcoat can be processed with appropriate application systems from the BÜFA®-Tec range.
ATTENTION! Use only dried and de-oiled compressed air!

Orientation for fire testing

• DIN 5510 - S4 / SR2 / ST2 (Gelcoat layer thickness 500 µm wet) with a 4 mm thick fibreglass laminate (resin:

BÜFA®-Firestop 8175-W-1) with 40 wt.% glass content.

• EN 45545 - HL 2 (Gelcoat layer thickness 800 µm wet) with a 4 mm thick fibreglass laminate (resin: BÜFA®-Firestop S 570) with 30 wt.% glass content.

Orientation fire tests are based on laminates under 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 topcoat resins 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.

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

Colouring

BÜFA®-Firestop gelcoats can only be pigmented to a limited range due to their fire retardant properties.
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.

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.
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.