

BÜFA

NEW GENERATION WITH SYSTEM SOLUTIONS

Saves weight and increases fire resistance on a railway level

BÜFA®-Fire Retardant and BÜFA®-Foaming Resin



Composites

Complete Systems for Light-Weight Construction

BÜFA®-Foaming Resin System

YOUR ADVANTAGES:

- Lighter parts (up to 45 % weight reduction)
- Materials saving
- Thermal and sound insulation properties
- Versatile possibilities for shape and colouring
- Adjustable fire resistance



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ADVANTAGES OF PRODUCT PROCESSING:

- Homogeneous foam formation
- Good workability
- High surface quality

SYSTEM VARIETIES:

10 min. Version:
BÜFA®-Resin
UP 7312 MC Foaming

- + Foaming agent:
BÜFA®-Accelerator
Foaming Agent
- + Peroxide:
Curox M-303

20 min. Version:
BÜFA®-Resin
UP 8885 MC Foaming

- + Foaming agent:
BÜFA®-Accelerator
Foaming Agent
- + Peroxide:
Curox M-303

BÜFA®-Firestop S 900
Foaming Resin with
BÜFA®-Firestop GC S 285

- + Foaming agent:
BÜFA®-Accelerator
Foaming Agent
- + Peroxide:
Curox M-303

**WORLD
WIDE 1ST**



Next Generation of BÜFA®-Firestop Gelcoats

BÜFA®-Firestop GC S 285

YOUR ADVANTAGES:

- Ready to use
- Increased flexibility (low brittleness)
- Low shrinkage
- Reduced emissions
- Sufficient fire protection as of a 600 µm thick layer
- EN 45545 (R1, R7, R17) HL2 / HL3 - with and without laquer



ONE GELCOAT FOR ALL TYPES OF APPLICATIONS:

- Hand lay up: BÜFA®-Firestop GC S 285 + BÜFA®-Firestop 8175-W-1
- RTM / VI: BÜFA®-Firestop GC S 285 + BÜFA®-Firestop S 425
- Light RTM: BÜFA®-Firestop GC S 285 + BÜFA®-Firestop S 900 Foaming resin.
Polyester foaming resin system according to EN 45545, HL 2

WORLD
WIDE 1ST



CUSTOMER VOICE

"RCS produces interior and exterior components for rail vehicles with the new generation of the gelcoat system BÜFA Firestop S 285. With this system, the highest fire protection requirement HL3 can be achieved with a layer just 600 µm thick in combination with one of the time-tested BÜFA Firestop Resins according to R1 and R17. Together with a subsequent coating, HL2 classification can also be reliably observed. The BÜFA Firestop system S 285 is "ready to use" which means, for example, that pre-acceleration and adjustment of viscosity are not necessary. The new generation also allows more machine-friendly pro-

cessing and the reactivity of the gelcoat can be very easily controlled by the concentration of peroxide, depending on the component. Large components in particular can be reliably processed and reproduced with BÜFA Tec machine technology and a coordinated BÜFA release agent system."

Steve Rennau, Development and Process Technology, RCS
RCS is a successful, international system supplier of glass fibre reinforced plastic components and plastic assemblies for the rail vehicle industry segment.

An Innovative System for Future Needs

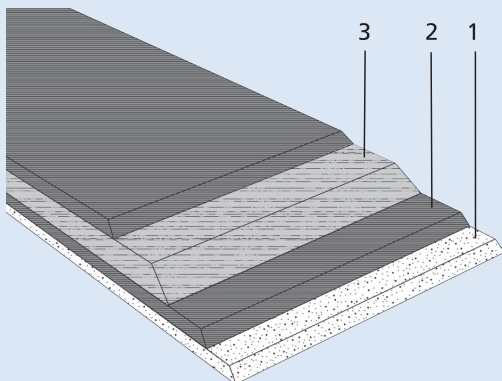
LEO - Light-weight with Extreme Opportunities

YOUR ADVANTAGES:

- 40 % lighter parts with same stiffness compared to HLU
- Cost effective: 30-35 % faster production of parts compared to HLU
- 12 x higher tensile strength compared to hand lay-up laminate
- 5 x higher part stiffness with same weight
- The system components do not contain any toxic ingredients such as halogen or antimony (III)-oxide.
- EN 45545 (R1, R7, R17) HL3, DIN Spec 91326 compliant



MODULAR SYSTEM: OUTSTANDING COMPONENTS FOR EACH PROJECT



1. Protection Layer LEO
2. Structural Layer:
LEO Reinforcement
(glass / carbon) and
LEO Injection Resin
3. Core material:
Balsa wood or PVC 80

COMBINATION OF FIRE RESISTANT FABRICS WITH A LOW VISCOUS FIRE RESISTANT RESIN AND A HIGH FIRE RESISTANT PROTECTION LAYER

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BÜFA Cares about your Safety

Fire resistant components can save lives!

BURNING PASSION

We are full enthusiasm for what we do - developing fire resistant systems that are continuously better and save lives in an emergency. We design products for all applications. We even have application solutions for the bus sector to protect components from emerging fires.

DECISIVE PRECISION

This is our strength and particularly in the area of fire protection an absolute necessity. BÜFA Fire Retardant Systems are precisely coordinated to each other. In all systems in which glass fibre reinforced plastics are used BÜFA®-Firestop makes the composite material GRP a flame resistant material and GRP cladding into a fire protection wall.

Conclusion: BÜFA®-Firestop protects itself.

WHAT ARGUES IN FAVOUR OF BÜFA FIRE RETARDANT SYSTEMS?

- In-house research and development
- In-house production
- In-house test centre where the following test methods are used:
 - ISO 5660 (Cone Calorimeter)
 - DIN 5510
 - ISO 4589-2 (Limited Oxygen Index)
 - UIC 564

THE RESULT:

**MAXIMUM SAFETY AND MAXIMUM EFFICIENCY
AT MINIMUM COST.**

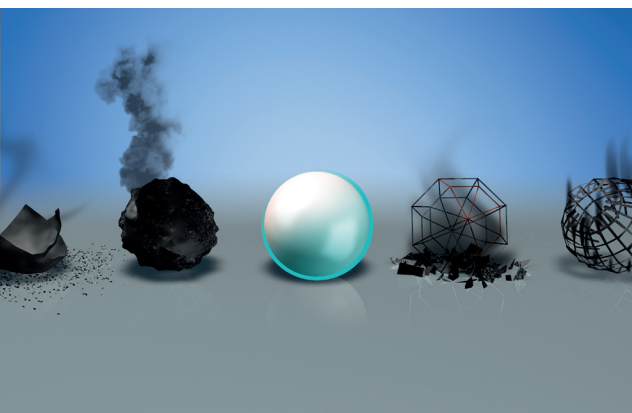


Cone Calorimeter

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BÜFA Composite Systems



System solutions as well as innovative and tailor-made composite materials for automotive, transportation, rail vehicle, wind energy, building and construction, sanitary, tanks and pipes, marine and swimming pool industries.

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