**Technical Data Sheet**

# BÜFA®-Firestop S 570

**Fire Protection Laminating Resin**

Prod. No. 7160570

**Product description**

BÜFA®-Firestop S 570 is a pre-accelerated, highly thixotropic laminating resin that is also moderately reactive with low viscosity. It is made from a special, unsaturated polyester resin dissolved in styrene and MMA. The resin is halogen-free and contains aluminium hydroxide as a fire retardant. A skin-forming agent has been added to reduce the emission of styrene.

**Applications**

BÜFA®-Firestop S 570 is used for the production of moulded parts that have fire protection properties.

**Specifications / technical data**

| Property | Test Method | Value | Unit |
|---|---|---|---|
| **Density at 20 °C** | DIN 53 217/2 | approx. 1,5 | g/ml |
| **Viscosity at 20°C Brookfield RV/DV-II spl 5 rpm 20** | ISO 2555 | 700-1500 | mPas |
| **Monomer content** | | 16 - 18 | % |
| **Flash point** | DIN 53 213 | + 29 | °C |

**Curing**

| Reactivity | | |
|---|---|---|
| **BÜFA method in accordance with DIN 16 945 6.2.2.1**<br><br>(100 g resin + 2 ml Butanox M-50 or Curox M 303) | 20 - 30 °C<br>20 °C – Tmax<br>Tmax | 25 - 35 min<br>45 - 60 min<br>100 - 130 °C |
| **Gel time at 20 °C in a 100 g cup with 2 ml Curox M 102:** | | 50 - 60 min |

**Attention!**

The information given above refers exclusively to the use of the catalyst named and the quantity specified. The use of different products or differing quantities may yield different results.

**Mechanical properties**

| Property | Test method | Value |
|---|---|---|
| Tensile strength | ISO 527-2 | 82 MPa |
| Tensile E-modulus | ISO 527-2 | 8300 MPa |
| Flexural strength | DIN 53 452 | 180 MPa |
| Flexural E-modulus | DIN 53 457 | 8400 MPa |

* measured on test plates with 30 % by weight glass content and conditioned for 8 hours at + 80 °C.

**Colouring**
The product has a blue shade of colour.

**Properties of the cured base resin**

| Property | Test method | Value |
|---|---|---|
| Heat deflection temperature (HDT) | ISO 75-A | 90 °C |
| Glastransition temperature (Tg) | DIN 53765 | 115 °C |

**Directions for use** **Working with glass fiber material**
Due to its high thixotropic stabilisation, there is practically no settling out of the filler. The storage viscosity for this product is between 3.000 - 4.000 mPas. Long stirring procedures should be avoided; the resin should be gently stirred for a maximum of 0.5 h before using. "Gentle stirring" is understood as stirring at low speed, just setting material at the edge of the container in motion. Only a minimal "whirlpool" effect should take place at the centre of the container. The best glass fibre material to use is an open, emulsion-bound mat since this allows faster impregnation by the resin.

**Note**
To achieve optimal mechanical and fire protection properties, the moulded parts should be post-cured for at least 8 hours at + 80 °C.

The thickness of the laminate and its construction as a whole, including any top coats, varnishes, applications, sandwich inserts, etc. also have considerable influence on fire behaviour. It should also be remembered that individual component tests are prescribed for most applications.

**Fire protection properties**
Evaluation according to DIN 5510 / part 2 tested on a 3 mm thick random fibre laminate with 30 % glass content:

| | |
|---|---|
| Flammability class: | S 4 |
| Smoke development rating: | SR 2 |
| Drop forming class: | ST 2 |

The laminates were produced under ideal, controlled, laboratory conditions. This information does not replace component tests by the manufacturer.

**Storage / Handling**
This product must be stored cool in closed containers, protected from sunlight. Shelf-life is at least 2 months in unopened, original containers stored up to a temperature of 20 °C. Gel and curing times may change with increasing duration of storage.

**Former product name**
700-0570 BÜFA®-Firestop S 570



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