

BÜFA®-Firestop 6806-N-5

Fire Protection Resin

Prod. No. 7166806

Product description BÜFA®-Firestop 6806-N-5 is an unfilled, unsaturated, orthophthalic acid based polyester resin dissolved in styrene that has not been pre-accelerated. The resin is halogenated, moderately reactive and not thixotropic.

Applications BÜFA®-Firestop 6806-N-5 is used for the production of translucent sheets with fire protection properties. It is suitable for machine or manual application. BÜFA®-Firestop 6806-N-5 has a very high light transmission value in cured laminates (depending on the glass fibre products used for reinforcement).

Specifications / technical data	Property	Test method	Value	Unit
	Viscosity at 23 °C	TM 2013	195 - 205	mPas
	Colour, Lico 200	TM 2017	2,0 max.	APHA
	Non-volatile constituents	TM 2033	59,5 - 62,5	%
	Density at 20/23 °C	TM 2160	1,135	g/ml
	Appearance	TM 2265	slightly cloudy	
	Stability	TM 2300C	100	min
	Refraction index at 23 °C	TM 2150	1,529 - 1,532	
	Flash point	TM 2800	29	°C

Curing

Reactivity:
BÜFA method in accordance with DIN 16 945 6.2.2.1
 (100 g resin + 0.5 % BÜFA Accelerator Co 1 + 2 % Butanox M-50)

25 - 35 °C	13.0 - 15.0 min
25 °C - Tmax	18 - 22 min
Tmax	170 - 190 °C

Gel time at 25 °C in a 100 g cup with 0.5 % BÜFA Accelerator Co 1 + 2 % Butanox M-50:

	13.0 - 15.0 min
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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	<u>Property*</u>	<u>Test method</u>	<u>Value</u>
	Flexural strength	ISO 178	197 MPa
	Flexural E-modulus	ISO 178	8,500 MPa
	Impact resistance, unnotched	ISO 179	40 kJ/m ²
	Tensile strength	ISO 527-2	96 MPa
	Tensile E-modulus	ISO 527-2	8,700 MPa

* Measured in a standard laboratory atmosphere on test specimens made of a laminate with 3 layers of powder bound, glass fibre mat 450 g/m² (resin-glass ratio 2:1) that were conditioned for 2 h at +70 °C + 1 hour at 120 °C after curing for 16 hours at room temperature (stored). Curing formulation: 100g resin + 0.5 % NL 49 P (Akzo) + 2 % Butanox M 50.

Properties of the cured base resin	<u>Property</u>	<u>Test method</u>	<u>Value</u>
	Flexural strength ₋ *	ISO 178	108 MPa
	Flexural E-modulus ₋ *	ISO 178	3,300 MPa
	Impact resistance, unnotched ₋ *	ISO 179	7.6 kJ/m ²
	Tensile strength ^{**}	ISO 527-2	64 MPa
	Tensile E-modulus ^{**}	ISO 527-2	3,400 MPa
	Elongation at break ^{**}	ISO 527-2	3,1 %
	Heat distortion temperature (HDT) ₋ *	ISO 75-A	63 °C

* Measured in a standard laboratory atmosphere on cast test specimens made of pure resin conditioned for 2 hours at +70 °C and 1 h at 120 °C after curing at room temperature for 16 hours (stored). Curing formulation: 100 g resin + 0.5 % NLP 49 P (Akzo) + 2.0 % Butanox M 50.

** Measured in a standard laboratory atmosphere on cast test specimens made of pure resin conditioned for 8 hours at +80 °C after curing at room temperature for 16 hours (stored). Curing formulation: 100 g resin + 0.5 % NLP 49 P (Akzo) + 2.0 % Curox M 50.

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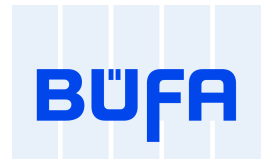
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Directions for use	Before using, the resin should be conditioned to at least 15 °C. Stir the resin before adding the accelerator.
Note:	<p>The thickness of the laminate and its entire construction, including any top coats, varnishes, applications, sandwich components, etc. also have a decisive influence on fire behaviour. Always remember that individual component tests are mandatory for most applications.</p> <p>BÜFA®-Firestop 6806-N-5 is light stabilised. If the finished product is exposed to weather or UV-radiation, additional protection in the form of a varnish or a film should be applied.</p> <p>If you have any questions in this conjunction, please get in touch with our Technical Service Department.</p>
Fire protection properties	<p>Result of an orientation test in accordance with BS 476, part 3: SAB</p> <p>Laminate construction: 1 layer 450 g/m² powder bound mat (1 mm)</p> <p>The laminates were produced under ideal, controlled laboratory conditions.</p> <p>This information does not replace component tests by the manufacturer.</p>
Storage/Handling	This product must be stored cool in closed containers, protected from sunlight. Shelf-life is at least 3 months in unopened, original containers stored up to a temperature of 20 °C. Gel and curing times may change with increasing duration of storage.

Note: The Information given above is based on our current state of knowledge and experience. In view of the many factors that may influence working conditions and the application of our products, the user is not relieved from carrying out his own tests and experiments. No legally binding warranty of certain properties or suitability for a particular purpose can be derived from this information. It is the responsibility of the receiver or user of our products to observe proprietary rights as well as existing laws and regulations. The latest version of the corresponding EU Safety Data Sheet must also be observed.

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