SynFlex Elektro GmbH Auf den Kreuzen 24 D-32825 Blomberg Germany Telefon +49-5235-968-0 E-Mail info@synflex.de



Dolphon® XL-2109 1K Resin

Dolphon® XL-2109 is a 1K resin based on polyester with UV catalysts.

Attributes

Dolphon® XL-2109 has the following outstanding features:

- very low weight loss on cure
- very low odour
- excellent wetting and penetration properties
- very good bond strength
- fast curing cycles
- · medium high viscosity
- good adhesion

Application

Dolphon® XL-2109 can be applied in roll-through and automatic machines.

Recommended cycle for roll-through application:

- Pre-heat the windings to 70-80 °C.
- Bring rapidly the windings to a temperature of 140 °C to gel the resin by Joule-effect.
- Cure 30 min. at 150-160 °C by Joule-effect.
- Complete the cure of the resin on the external part of the unit by UV-rays for 5-10 min.

These are general information. For specific conditions please get in touch with us.

Standards

UL approved class H (180 °C) - file OBOR2.E317427 and OBJS2.E317429

UL 1446	Twisted pairs	Helical Coils
MW 16-C	220 °C	
MW 28-C	130 °C	
MW 35-C	180 °C	200 °C

Delivery forms

Dolphon® XL-2109 is delivered in 25 kg disposable containers, 230 kg barrels or 1,200 kg containers.

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Storage

Dolphon® XL-2109 can be stored for 6 months at room temperature (max. 25 $^{\circ}$ C).

The casting resin must be stored in a cool place and protected against direct sunlight, UV radiation and sources of heat.

Hardening

Recommended cure time:

150-160 °C - 30 min. + 30 min. UV-rays

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Mechanical	Unit of measure	Conditions	Values	Test method
Weight loss	%	15 g at 100-140°C for 20 min.	<3.5	-
Bond strength	N	155 °C	55	ASTM D-2519
Bond strength	N	80 °C	85	ASTM D-2519
Bond strength	N	25 °C	170	ASTM D-2519

Thermal	Unit of measure	Values	Test method
Thermal class		H (180 °C)	
Flashpoint	°C	>130	

Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm	25 °C	120	ASTM D-115
Volume resistivity	Ω x cm	50 % RH at 23 °C	1.4 x 10^14	ASTM D-257
Surface resistivity	Ω x cm	50 % RH at 23 °C	1.2x10^14	ASTM D-257
Spec. resistance	Ωcm	ASTM D-257		

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Liquid phase	Unit of measure	Conditions	Values	Test method
Gel time	min	at 100 °C	15-25	
Viscosity	S	25 °C	55-85	DIN Cup 6
Viscosity	S	25 °C	60-90	Ford Cup 6
Viscosity	cps	25 °C	1400-1700	Brookfield
Specific density	g/cm³	25 °C	1.10 - 1.20	

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