

Description

Hybrid unsaturated polyester resin, diluted in styrene, with medium viscosity and medium reactivity, thixotropic and preaccelerated with catalyst indicator and LSE system.

Applications

SIRESTER ELS 0850/AMT/V is a general purpose material suitable for hand lay-up and spray-up, in particular for nautical applications: it assures high wetting capability, low styrene content and good mechanical strengths along with low exothermic peak; it contains an additive which appears on the surface drastically reducing the styrene emission: it is suggested to sand the hardened surface before applying other layers. Lloyd's Register certification n° LR22412943ALP.

Sales specification

Property	Value	Unit	Method
Acid number	≤ 30	mg KOH/g	SIR 10231

Typical Properties

Property	Value	Unit	Method
Appearance	Blue hazy	-	SIR 10010
Styrene content	< 35	%	SIR 10257
Thixotropic index at 25 °C	≥ 3		SIR 10215
- 2 rpm	≥ 2000	mPa.s	SIR 10215
- 20 rpm	≤ 700	mPa.s	SIR 10215
Gel time at 25 °C ⁽¹⁾	20	minutes	SIR 10276
Time to peak	35	minutes	SIR 10276
Exothermic peak	150	°C	SIR 10276
Styrene emission	< 50	g/m ²	SIR 10295
Stability at 65°C	6	days	SIR 10242

(1) Formulation: 100 gr resin + 2,00 ml MEKP-50.

During long storage a slight increase of the geltime can occur: we suggest to adjust the amount of catalyst in order to obtain correct values.

SIRESTER[®]: SIR INDUSTRIALE registered trade mark.

N.B.: The data given in this brochure do not constitute characteristic properties of the single product.

To our best knowledge, the information contained in this brochure is accurate and corresponds to the truth.

However, any recommendations or suggestions are provided without any guarantee, since the conditions in which the products are used are not under our control. Furthermore, nothing contained in this brochure shall be interpreted as a recommendation for using the product in violation of any patents relating to the material and their uses.

Mechanical properties of pure cured resin (*)

Property	Value	Unit	Method
Barcol hardness	45		EN 59
Flexural strength	120	MPa	ISO 178
E-Module, flexion	4100	MPa	ISO 178
Tensile strength	70	MPa	EN ISO 527
E-Module, tension	4000	MPa	EN ISO 527
Elongation at break	2,0	%	EN ISO 527
HDT	80	°C	EN ISO 75 A

(*) typical properties, not suitable for specifications; postcuring cycle: 24 hours 25 °C + 2 hours 100 °C

Mechanical properties of the reinforced resin (glass/resin 30/70) (*)

Property	Value	Unit	Method
Flexural strength	210	MPa	ISO 14125
E-Module, flexion	8800	MPa	ISO 14125
Tensile strength	110	MPa	EN ISO 527
E-Module, tension	9100	MPa	EN ISO 527

(*) typical properties, not suitable for specifications; postcuring cycle: 24 hours 25 °C + 2 hours 100 °C

Supply Form

Product is available in a 225 kg lined drum, 1000 kg container or in bulk.

Storage stability

The product is stable for 6 months if stored in the original unopened packaging), below 30 °C and away from direct sunlight and heat sources. Keep away from iron and copper salts, organic and inorganic peroxides. Thixotropic properties are guaranteed for 3 months: a long period of storage can cause slight segregation of the solid part of the product. Stir the resin before use

Safety

The product is flammable and harmful. Further information is provided in the relevant safety data sheet.

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