BIOSIRCLE® UPFT 7510/AT

PROVISIONAL DATA SHEET

RP/UPFT7510AT/072024

Description

Unsaturated ortho-terephthalic polyester resin, diluted in styrene, with medium viscosity and medium reactivity, thixotropic and preaccelerated with catalyst indicator.

Applications

BIOSIRCLE UPFT 7510/AT is a general-purpose material, suitable for hand lay-up and spray-up, in particular for industrial applications: it contains 52% of raw materials from recycle industry (PET polymers and bio-based products) and provides efficient wetting capability, low exothermic peak and good mechanical strengths.

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	44	%	SIR 10257
Thixotropic index at 25 °C	≥ 3,0		SIR 10215
- 2 rpm	≥ 2400	mPa.s	SIR 10215
- 20 rpm	≤ 800	mPa.s	SIR 10215
Gel time at 25 °C (1)	16	minutes	SIR 10267
Hardening time	30		SIR 10267
Exothermic peak	150	°C	SIR 10267
Stability at 65°C	6	days	SIR 10242

⁽¹⁾ Formulation: 100 gr resin + 1,50 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.

BIOSIRCLE ®: 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.



PROVISIONAL DATA SHEET

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Mechanical properties of pure cured resin (*)

Property	Value	Unit	Method
Barcol hardness	40		EN 59
Flexural strength	120	MPa	ISO 178
E-Module, flexion	3500	MPa	ISO 178
Tensile strength	70	MPa	EN ISO 527
E-Module, tension	3400	MPa	EN ISO 527
Elongation at break	3,5	%	EN ISO 527
HDT	65	°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	8600	MPa	ISO 14125
Tensile strength	100	MPa	EN ISO 527
E-Module, tension	8700	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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