

BIOSIRCLE® UPFT 5225

PROVISIONAL DATA SHEET

RP/UPFT5225/072024

Description

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

Applications

BIOSIRCLE UPFT 5225 is particularly suitable for hot press moulding and sheets production applications: it contains 34% of raw materials from recycle industry (PET polymers and bio-based products) and provides good wetting capability, quick cycle time and good mechanical strengths.

Sales specification

Property	Value	Unit	Method
Acid number	≤ 30	mg KOH/ g	SIR 10231
Viscosity at 25°C	450 - 550	mPa s	SIR 10017

Typical Properties

Property	Value	Unit	Method
Appearance	Hazy	-	SIR 10010
Styrene content	42	%	SIR 10257
Gel time at 60 °C ⁽¹⁾	12	minutes	SIR 10298
Time to peak	10	minutes	SIR 10298
Exothermic peak	170	°C	SIR 10298
Stability at 65 °C	6	days	SIR 10242

(1) Formulation: 100 gr resin + 0,20 ml Co (octoate) 6% + 1,20 ml MIKP.

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.

BIOSIRCLE® UPFT 5225

PROVISIONAL DATA SHEET

RP/UPFT5225/072024

Mechanical properties of pure cured resin (*)

Property	Value	Unit	Method
Barcol hardness	40		EN 59
Flexural strength	110	MPa	ISO 178
E-Module, flexion	3300	MPa	ISO 178
Tensile strength	70	MPa	EN ISO 527
E-Module, tension	3200	MPa	EN ISO 527
Elongation at break	3,0	%	EN ISO 527
HDT	70	°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	200	MPa	ISO 14125
E-Module, flexion	8400	MPa	ISO 14125
Tensile strength	100	MPa	EN ISO 527
E-Module, tension	8600	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.

Safety

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

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.