

SIRESTER[®] IS 4245

PRODUCT DATA
SHEET
RP/4245/092014

Description

Unsaturated, isophthalic, polyester resin, diluted in styrene, with high reactivity and low viscosity, thixotropic and preaccelerated.

Applications

SIRESTER IS 4245 is particularly suitable for the production of large reinforced plastic parts requiring mechanical and chemical resistance properties higher than obtainable with standard orthophthalic resins.

Sales specification

Property	Value	Unit	Method
Acid number	≤ 20	mg KOH/g	SIR 10231

Typical Properties

Property	Value	Unit	Method
Appearance	Hazy rose liquid		SIR 10010
Styrene content	45	%	SIR 10352
Stability at 65 °C	6	days	SIR 10242
Thixotropic Index at 25 °C	> 2,5		SIR 10215
- 2 rpm	> 1500	mPa s	
- 20 rpm	< 650	mPa s	
Gel time at 25 °C ⁽¹⁾	17	minutes	SIR 10267
SPI	11	minutes	
peak temperature	220	°C	SIR 10232
time to peak	13	minutes	

(1) Formulation: 100 g resin + 1,5 ml MEKP 50%.

During long storage a slight increase of the gel time 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	115	MPa	EN 63
E-Module, flexion	4100	MPa	EN 63
Tensile strength	70	MPa	EN 61
E-Module, tension	3700	MPa	EN 61
Elongation at break	2,3	%	EN 61
HDT	100	°C	EN ISO 75 A

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

Property	Value	Unit	Method
Flexural strength	230	MPa	EN 63
E-Module, flexion	9100	MPa	EN 63
Tensile strength	110	MPa	EN 61
E-Module, tension	8900	MPa	EN 61

Supply Form

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

Storage stability

The product is stable for 3 months if stored in a stainless steel tank or lined drums (avoid glass fibre based containers or tin plated drums), at 20 °C temperature, in a dark/ventilated place. Keep away from iron and copper salts, organic and inorganic peroxides. Stirring the product before using is suggested. A long period of storage can cause slight segregation of the solid part of the product: stirring the material before using is strictly suggested.

Safety

The product is flammable and harmful.

Further information is provided in the relevant safety data sheet.

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