

**ES-2146 FIBER TYPE ORTHO-DCPD BASED THIXOTROPIC POLYESTER****Description and Basic Properties**

ES-2146 is a pre-accelerated, ortho-DCPD based unsaturated thixotropic polyester resin. It has a low styrene content compared to conventional resins. GRP applications are used. Because of the low deformation and thixotropy when it is applied to vertical surfaces there will be no flowing and hanging and provides homogenous final product. It is used in automotive sector, swimming pool applications, production of tractor and heavy-duty vehicle cabins also it is optimized for marine applications such as yacht, boats and catamarans.

**Physical Properties**

<u>Property</u>	<u>Unit</u>	<u>Deviation</u>	<u>Value</u>
Appearance	-	-	Cloudy, Bluish
Density(20°C)	g/cm <sup>3</sup>	± 0,1	1,1
Viscosity <sup>1</sup>	cp	± 200(5 rpm)	2500
		±50 (50 rpm)	750
Monomer Content	%	± 2	40
Gel Time <sup>2</sup>	Min	± 5	25
Cure Time <sup>2</sup>	Min	± 5	20
Peak Exotherm <sup>2</sup>	°C	± 15	145
Shelf Life	Month	-	6

<sup>1</sup> Viscosity is measured at 25°C, with spindle 4.

<sup>2</sup> They are measured at 25°C, by adding 1,5 mL MEK-peroxide (Butanox M50) to 100 g sample.

## Properties of Cured Resin Without Filler

<b><u>Test</u></b>	<b><u>Method</u></b>	<b><u>Deviation</u></b>	<b><u>Value</u></b>
<i>Flexural Strength</i>	(ISO 0178)	± %5	90 MPa
<i>Flexural Modulus</i>	(ISO 0178)	± %5	3800 MPa
<i>Strain at Fracture</i>	(ISO 0178)	± %5	% 2,55
<i>Tensile Strength</i>	(ISO 0527)	± %5	65 MPa
<i>Modulus of Elasticity in Tensile</i>	(ISO 0527)	± %5	4850 MPa
<i>Elongation at Break</i>	(ISO 0527)	± %5	% 1,3
<i>Impact Strength</i>	(ISO 180)	± %5	9,6 KJ/m <sup>2</sup>
<i>Heat Distortion Temperature / HDT</i>	(ISO 0075-A)	± %5	68°C

## Storage Guidelines

Keep container tightly closed in a cool dry place and keep away from direct sunlight. Products with the same charge numbers and production dates must be stored together. Pay attention to the handling life. Don't hoard more than 3 packages one on top of each other. (Acceptable for the discharges of tins)

\* These informations are prepared by regarding general conditions. ESKİM A.Ş is not responsible for any problem which occurs due to lack of information.

