TECHNICAL DATASHEET

ZOLTEK™ PX35 UNI-DIRECTIONAL FABRICS

DESCRIPTION

ZOLTEK PX35 Stitch-Bonded Uni-Directional Carbon Fabrics are produced from our Zoltek PX35-1* (Multicompatible with epoxy, vinylester), PX35-7 (compatible with vinylester) 50K Continuous Tow Carbon Fiber. Unique fiber spreading techniques are utilized to obtain a wide range of UD fabric weights for a varied set of composite part applications. Quick composite part build-up is cost effectively achieved with our diverse weight range of low-cost carbon fabric products.

**Epoxy resin binder available upon customer request.*

MATERIAL OVERVIEW	UD150	UD200	UD300	UD400	UD500	UD600	UD900V
0° Carbon (nominal) Zoltek 50K	158 g/m²	200 g/m²	309 g/m²	403 g/m²	500 g/m²	600 g/m²	865 g/m²
90° Glass 34 dtex (nominal)	10 g/m²	10 g/m²	10 g/m²	10 g/m²	10 g/m²	10 g/m²	-
Polyester Veil (nominal)	-	-	-	-	-	-	30 g/m²
Polyester Stitch 76 dtex (nominal)	6 g/m²	6 g/m²	6 g/m²	6 g/m²	6 g/m²	6 g/m²	5 g/m²
Total Fabric Weight (nominal)	182 g/m² 5.37 oz/yd²	224 g/m² 6.61 oz/yd²	333 g/m² 9.82 oz/yd²	419 g/m² 12.36 oz/yd²	516 g/m² 15.22 oz/yd²	624 g/m² 18.40 oz/yd²	900 g/m² 26.54 oz/yd²

Average Values Shown

FABRIC CONSTRUCTION	UD150	UD200	UD300	UD400	UD500	UD600	UD900V
Stitch Length	A variety of stitch lengths are available to meet application requirements.						
Stitch Pattern	A variety of stitch lengths are available to meet application requirements.						
Cured Thickness/Ply	0.21 mm	0.25 mm	0.37 mm	0.46mm	0.57 mm	0.69 mm	1.00 mm
Roll Width	30 cm - 61 cm - 122 cm						122 cm
Roll Length	100 m				50 m		30 m

Average Values Shown

The properties listed in this datasheet do not constitute any warranty or guarantee of values. This information should only be used for the purposes of material selection. Please contact us for more details.

ISO 9001 AS9100 BUREAU VERITAS Certification

ZOLTEK Toray Group

ZOLTEK Corporation
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ZOLTEK™ PX35 UNI-DIRECTIONAL FABRICS

AVERAGE COMPOSITE PROPERTIES (PX35-1/EPOXY)	SI	US	METHOD
Tensile Strength	1,400 MPa	203 ksi	DIN EN ISO 527
Tensile Modulus	119 GPa	17.2 msi	DIN EN ISO 527
Compressive Strength	980 MPa	142 ksi	DIN EN ISO 14126
Compressive Modulus	118 GPa	17.5 msi	DIN EN ISO 14126

AVERAGE COMPOSITE PROPERTIES (PX35-7/VINYLESTER)	SI	US	METHOD
Tensile Strength	1,400 MPa	203 ksi	DIN EN ISO 527
Tensile Modulus	119 GPa	17.2 msi	DIN EN ISO 527
Compressive Strength	980 MPa	142 ksi	DIN EN ISO 14126
Compressive Modulus	118 GPa	17.5 msi	DIN EN ISO 14126

Fiber Volume Fraction (FVF) is 55% ± 2.5%.

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TYPICAL PACKAGING

Wound on a cardboard cone, sealed in polyethylene bag, and placed in a cardboard box. Rolls stacked horizontally on pallets when shipping.

Requirements other than standard widths and roll lengths should be specified by purchase order.

APPROVAL

DNV-GL has granted approval to ZOLTEK PX35-1 and PX35-7 Uni-Directional Fabrics for use in wind energy and marine applications.

RENEWABLES CERTIFICATION
DNV·GL
TYPE APPROVAL
TA-DNVGL-CP-0434-06941

CERTIFICATION

ZOLTEK PX35 Fabrics are manufactured in accordance with ZOLTEK's written and published data. A Certificate of Conformance is provided with each shipment.

SAFETY

Obtain, read, and understand the Material Safety Data Sheet (SDS) before use of this or any other ZOLTEK product.

ISO 9001
AS 9100
BUREAU VERITAS
Certification

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