

For Engineering Thermoplastics

### DESCRIPTION

ZOLTEK's Type-83 chopped fiber format has the following characteristics:

- High bulk density values which allows for cleaner and more consistent flow rates
- Compact pellet form maintains its integrity from the package, into, and through the hopper
- Distributes easily during compounding, improving process and product performance
- Excellent mechanical and electrical properties:
  - High strength and modulus
  - Low density
  - Electrical conductivity
  - Dimensional stability
  - Low thermal expansion
  - Excellent friction/wear properties



### RECOMMENDED USE

High-Temperature Thermoplastics (HTTP): PEEK, PEI, PPA, PAI, PES, PSU

### APPLICATIONS

High operating temperature environments where excellent chemicals resistance, electrical properties, heat aging, dimensional capability, and mechanical properties are required.

MATERIAL OVERVIEW	SI	US
Sizing Content	1.5±0.5% by weight	
Moisture Content	0.20% maximum	
Unpacked Bulk Density (minimum)	350 g/L	22 lb/ft <sup>3</sup>
Fiber Length (nominal)	6 mm	0.25 in

*\*fiber properties generated using ASTM standard methods*

*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.*

TYPICAL PROPERTIES	PEI		PEEK		Method
	SI	US	SI	US	
Carbon Fiber Loading	40%		40%		—
Tensile Strength	190 MPa	27 ksi	228 MPa	33 ksi	ASTM D638
Tensile Modulus	26 GPa	3.7 msi	31 GPa	4.4 msi	ASTM D638
Elongation	1.5%		1.4%		ASTM D638
Flexural Strength	317 MPa	46 ksi	360 MPa	53 ksi	ASTM D790
Flexural Modulus	23 GPa	3.4 msi	28 GPa	4.1 msi	ASTM D790
Izod Impact - Notched	64 J/m	1.2 ft-lb/in	60 J/m	12.1 ft-lb/in	ASTM D256
Izod Impact - Unnotched	603 J/m	11.3ft-lb/in	700 J/m	113 ft-lb/in	ASTM D256

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### TYPICAL PACKAGING

- Each pallet contains 45 boxes and has a net weight of 1,800 lb (816 kg).
- Each box is 14.5" x 14.5" x 14.5" (36.8 cm x 36.8 cm x 36.8 cm) and contains 40 lbs (18.1 kg) of chopped fiber in a polyethylene bag.
- Chopped fiber is also available in 500 lb (227 kg) super sacks.

### CERTIFICATION

ZOLTEK PX35 Chopped Fiber is 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.