

Technical Datasheet

ZOLTEK™ OX Continuous Tow

Oxidized/Stabilized PAN Fiber (OPAN)

DESCRIPTION

ZOLTEK OX continuous tow fibers are oxidized/stabilized PAN fibers (OPAN) that are inherently fire resistant, thermally stable, exhibit excellent resistance to chemicals and solvents and are electrically nonconductive. Available crimped or uncrimped, ZOLTEK OX continuous tow is suitable for stretch breaking into yarn, cutting into flock, crimping & cutting into staple fibers for nonwovens or yarn spinning.



MATERIAL PROPERTY	STANDARD DENSITY			HIGH DENSITY	
Density	1.37 g/cm ³ (0.0495 lb/in ³)			1.40 g/cm ³ (0.0506 lbs/in ³)	
LOI	~45%			~55%	
Fineness	1.7 dTex	2.2 dTex	5.0 dTex	1.7 dTex	2.2 dTex
Tensile Strength	18.5-23 cN/tex (2.1 - 2.6 gpd) 240 -300 MPa (34,800 psi)				
Fiber Diameter	12.5 μ	14 μ	22 μ	12.5 μ	14 μ
Filament Count	300K		160K	300K	
Elongation to Break	22% - 28%				
Format	Uncrimped				

FIBER PROPERTIES		CHEMICAL COMPOSITION (%)		CHEMICAL RESISTANCE	
Density	1.36 g/cc min.	Carbon Content	62	Strong Acids	Good
Diameter	12.5 μ (1.7dTex)	Nitrogen	21.5	Weak Acids	Excellent
LOI	40%+	Oxygen	12	Strong Bases	Poor
Color	Black	Hydrogen	4.5	Weak Bases	Good
Resistivity	8x10 ⁸ ohms-cm	Sodium	< 0.1	Organic Solvents	Excellent
		Trace Metals	<0.01		

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 PACKAGING

ZOLTEK OX Continuous Tow is pleated into plastic lined boxes weighing approximately 185kg (400 lbs). Crimped tow available packaged in bales weighing approximately 430 kg (950 lbs).

CERTIFICATION

ZOLTEK OX Continuous Tow 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.

ZOLTEK™ OX

