



Advantex® Boron-Free E-CR Glass Reinforcement Properties

INTRODUCTION

Advantex® glass offers a full line of products for every type of composite application designed to face corrosive environments. As an engineer, end-user, or fabricator selecting Advantex® glass will ensure you will be specifying, using, or making the highest quality composite applications ready to face the harshest environments. Select Advantex® glass when corrosion failure is not an option.

A proven product, introduced to the market in the late 1990's, Advantex® glass offers the unique attributes of being both a boron-free E-glass and an E-CR glass reinforcement in accordance with ASTM D578, ISO 2078.



Boron-Free



E-CR: Recommended for use
In acidic environments

ADVANTEX® GLASS PROPERTIES

Advantex® glass is formulated using a patented boron-free glass composition giving it a high performance required in applications facing corrosion.

Property	Units	Test Method	Advantex®
Single Filament Tensile Strength	MPa	ASTM D2101	3,100 - 3,800
Single Filament Tensile Strength	Kpsi	ASTM D2101	450 - 550
Young's Modulus of Elasticity	GPa	Sonic	80 - 81
Young's Modulus of Elasticity	Mpsi		11.6 - 11.8
Fiber Density	g/cc	ASTM D1505	2.62
Softening Point	°C	ASTM C338	916
Annealing Point	°C	Parallel plate viscometry	736
Refractive Index		Oil Immersion	1.560 - 1.562
Dielectric Strength	kV/cm	ASTM D149	100 - 106
Dielectric Constant at 100kHz & 23 °C	kV/cm	ASTM D150	7.2
Dielectric Constant at 100kHz & 250 °C	kV/cm	ASTM D150	7.5

ADVANTEX® E-CR GLASS PRODUCTS OFFERED:

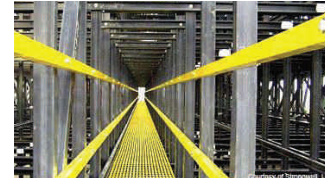
Owens Corning OCV™ businesses offer all product types necessary to make a complete FRP application out of high quality E-CR glass. Products Include:

- Direct Roving (single-end or Type 30® roving)
- Assembled Roving (spray-up, chop, SMC)
- Chopped Strand Mat (CSM)
- Continuous Filament Mat (CFM) – Unifilo® mat
- Non-Woven Veil
- Technical Fabrics

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Markets Where Advantex® Glass Reinforced Composites Provide Better Performance vs. Traditional Materials

- **Oil and Gas**
- **Power Plants**
- **Mining**
- **Industrial**
- **Water/Sewage**
- **Marine**
- **Tidal and sea wave energy**



TAKE RISK OUT – PUT ADVANTEX® GLASS IN

For more information, visit www.owenscorning.com/composites/aboutAdvantex.asp

THE OCV™ BUSINESSES ARE WORLDWIDE SUPPLIERS

Supporting our customers with the entire Advantex® reinforcement product range including glass fiber, technical fabrics and specialty glass.

Most OCV™ products are manufactured with Advantex® glass today. Ongoing conversion programs are underway in Europe, Asia Pacific and Latin America manufacturing plants while North America plants are already converted 100% to Advantex® glass.

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