Borosilicate
Corning® Eagle XG® LCD Glass

Description:
Corning® Eagle XG® is a borosilicate glass specifically designed for high performance LCD’s. It is considered environmentally friendly as it contains no heavy metals (arsenic, antimony, barium, or halides). The glass also features high surface quality, excellent thermal properties, low density, and high resistance to chemicals.

Features:
- Environmentally friendly (free of heavy metals)
- Excellent surface quality
- Good thermal properties
- Low density
- Chemical durability

Applications:
- Liquid crystal displays (LCDs)
- Lightweight optical windows

Physical Properties:

Mechanical:
- Density (20°C, 68 °F) 2.38 g/cm³ 148.5 lb/ft³
- Young’s Modulus 73.6 GPa 10.7Mpsi
- Poisson’s Ratio 0.23
- Shear Modulus 0.1 GPa 4.4 Mpsi
- Vickers Hardness (200 gm load, 25 sec dwell) 640

Viscosity:
- Working Point (10⁴ poises) 1293°C 2359°F
- Softening Point (10⁷.6 poises) 971°C 1780°F
- Annealing Point (10¹³ poises) 722°C 1332°F
- Strain Point (10¹⁴.5 poises) 669°C 1236°F

Thermal Expansion:
- 0 – 300°C (32 – 572°F) 31.7 x 10⁻⁷/°C 17.7 x 10⁻⁷/°F
- Room Temperature to Setting Point 25 – 675°C (77 – 1247°F) 35.5 x 10⁻⁷/°C 19.7 x 10⁻⁷/°F

Optical:
- Index of Refraction @
  - 435.8nm 1.5198
  - 467.8nm 1.5169
  - 480.0nm 1.5160
  - 508.6nm 1.5141
  - 546.1nm 1.5119
  - 589.3nm 1.5099
  - 643.8nm 1.5078
- Birefringence Constant: (331 nm/cm)/(kg/mm²)

Electrical:
- Log10 Volume Resistivity: (250°C, 482°F) 12.9
  - (500°C, 932°F) 8.8

Dimensions:
- Thicknesses: 0.0433”, 0.0275” (0.7mm, 1.1mm)
- Sizes: Up to 61” x 52” (1549.4 x 1320.8mm)
Borosilicate
Corning® Eagle XG® LCD Glass (cont.)

Transmittance

UV Transmission

Optical Transmission

Web: www.abrisatechnologies.com - E-mail: info@abrisatechnologies.com - Tel: (877) 622-7472