**SCHOTT Xensation™ Look**

Clear Borosilicate Glass for Optical Touch Technologies

Xensation™ is the answer to all of your cover and touch technology needs. SCHOTT is unique in being able to offer the broadest range of high-quality glass types for all cover and touch applications, including optical, capacitive, resistive and acoustic. Xensation™ Look is a thin, clear, borosilicate glass with high transmission in IR and VIS for optical touch technologies. Discover Germany’s newest Xensation™.

**Key-Benefits of Xensation™ Look**

- **High transmittance** for bright display luminance
- **Excellent resistance to humidity and smudges**
- **Low attenuation rate of IR wavelengths** used in optical touch systems
- **Broad thickness range** to accommodate any display size
- **Fire-polished surface grade**

*Xensation™ Look is our solution to optical touch technologies.*

In optical touchscreen technology, transmitters and receivers create a photoelectric grid which is disrupted upon touch. A controller determines the exact position of the touch by analyzing the disruption.

*Xensation™ Look is produced using SCHOTT’s special down-draw process.*
Thermal Properties

- Coefficient of Mean Linear Thermal Expansion $\alpha$ (20 °C; 300 °C): $7.2 \times 10^{-6}$ K$^{-1}$
- Transformation Temperature Tg: 557 °C
- Strain Point (10$^{14.5}$ dPas): 529 °C
- Annealing Point (10$^{13}$ dPas): 557 °C
- Softening Point (10$^{2.6}$ dPas): 736 °C
- Specific Heat Capacity $c_p$ (20 °C; 100 °C): 0.8 J/(g*K)

Chemical Properties

- Hydrolytic resistance acc. to DIN ISO 719
  - Hydrolytic class: HGB 1
  - Equivalent of alkali (Na$_2$O) per gram of glass grains in μg/g: 20
- Acid resistance acc. to DIN 12116
  - Acid class: S 2
  - Half surface weight loss after 6 hours in mg/dm$^2$: 1.4
- Alkali resistance acc. to DIN ISO 695
  - Class: A 2
  - Surface weight loss after 3 hours in mg/dm$^2$: 88

Mechanical Properties

- Young’s Modulus E: 72.9 kN/mm$^2$
- Knoop Hardness HK 0.1/20: 590
- Poisson’s Ratio: 0.208
- Stress Optical Coefficient C (1.02 $\times$ 10$^{-12}$ m$^2$/N): 3.4
- Torsion Modulus G: 30.1 kN/mm$^2$

Electrical Properties

- Dielectric Constant $\varepsilon_r$ at 1 MHz: 6.7
- Dissipation factor tan $\delta$ at 1 MHz: 61 $\times$ 10$^{-4}$
- Electric Volume Resistivity $\rho_D$ for A.C. at 50Hz
  - $\nu = 250$ °C: 1.6 $\times$ 10$^8$ Ω cm
  - $\nu = 350$ °C: 3.5 $\times$ 10$^6$ Ω cm

Optical Properties

- Refractive Indices
  - $n_e$ ($\lambda = 546$ mm): 1.5255
  - $n_d$ ($\lambda = 588$ mm): 1.5231
- Abbe Value $v_e$: 55
- Luminous Transmittance $T_{D65}$ (Glass thickness 1.1 mm): 91.7%

Sheet Dimensions

- Nominal Thickness [mm]: 0.03 - 1.1
- Width [mm]: 360 $\pm$ 10 / -0
- Length [mm]: 440 $\pm$ 10

Following Thicknesses are available [mm]: 0.03; 0.05; 0.07; 0.10; 0.145; 0.175; 0.21; 0.25; 0.30; 0.40; 0.50; 0.55; 0.70; 0.90; 1.10