

B 270

General Description

B 270 – Superwite is a clear high-transparent crown glass produced by melting chemically purest raw materials. This glass is marked by a high transmission in the range of the visible light as well as in the infrared and ultra-violet region (please refer to the transmission curve).

For many fields of application (e.g. cover panes for copying machines and micro reading devices, front covers for oscillograph tubes) B 270 — Superwite can be used without further surfacing.

Fields of Application

- Large area LCD covers.
- Front covers for oscillograph tubes and other monitor tubes.
- Optical elements for light sensors, measuring scales, controlling apparatus and devices.
- Signal optics.
- Lighting optics in projectors.
- Cover panes for copying machines and micro reading devices.
- Substrates for photomasks for production of electronic elements.

Technical Data

Optical Properties:

Refractive indices at 20°C

n_e ($\lambda = 546 \text{ nm}$) 1.5252

n_d ($\lambda = 588 \text{ nm}$) 1.5231

Stress-optical coefficient

c ($\lambda = 555 \text{ nm}$) $2.70 \cdot 1.02 \cdot 10^{-12} \text{ m}^2/\text{N}$

Thermal Properties

Mean Linear Thermal Coefficient of Expansion

a (20 – 300°C) $93.3 \cdot 10^{-7}/\text{K}$

Transformation point

($10^{7.6} \text{ d Pas}$) 533°C

Softening point

(10^{13} d Pas) 708°C

Forming point

(10^4 d Pas) 1006°C

Chemical Properties

Hydrolic class as per

DIN 12111 3

Na₂O-donation in mg/g glass as per

DIN 12111 143

Mechanical Properties

Density in g/cm³ at 23°C 2.55

