

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 ultraviolet 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

