

Description:

N-BK-7 is a barium borosilicate glass known for its high transmission and clean, clear appearance. It is a standard by which many other glasses are compared, both optical and non-optical types.

Available Thicknesses, Sizes: N-BK-7 is produced in strips and blocks up to about 14 inches wide and about 2.8" thick. We can fabricate them to any smaller size. Larger strips and sizes are usually available upon request.

Properties:

Refractive Index: $n_d (\lambda = 588 \text{ nm}) = 1.51680$

Mechanical and Thermal:

Density	2.51 g/cm ³
Thermal Coefficient of Expansion (20-300°C)	83 x 10 ⁻⁷ /°C
Softening Point	719°C
Microhardness (HK _{0.1/20})	610

Internal Transmittance: (@ 5 mm thick)

310 nm	59%
335 nm	95%
365-1529 nm	99%+
2325 nm	89%

Chemical:

Climatic Resistance	Class 2
Stain Resistance	Class 0
Acid Resistance	Class 1
Alkali Resistance	2.0
Phosphate Resistance	2.3

Applications:

Optical substrates, image-forming optics, electronics, laboratory and coating substrates.

Flatness, parallelism, cutting tolerances, roughness, cosmetic defects and visual inspection all conform to the specifications to be agreed upon by Precision Glass & Optics and the customer.