

SUPRAX 8488

SUPRAX[®] 8488 borosilicate glass combines low thermal expansion with thermal pre-stressing (tempering) to create a material with a high resistance to sudden temperature changes which is ideal for glass exposed to extreme temperature and pressure conditions

TYPICAL PROPERTIES

Thermal expansion (20-300°C) α	= 4.3x10 ⁻⁶ K
Transformation Temperature T _g	= 540°C
Annealing Temperature T _u	= 560°C
Softening Temperature M _g	= 800°C
Working Temperature 10 ⁻⁴	= 1200°C
Composition (wt %)	SiO ₂ ~78.0 Al ₂ O ₃ ~3.0 B ₂ O ₃ ~10.0 Na ₂ O~7.0 ZrO ₂ ~2.0
Density	2.3 1 g/cm ³
Modulus of elasticity	67000N/mm ²
Poisson's ratio	m0.20
Specific thermal stress w	= 0.36 N mm ⁻² K ⁻¹
Thermal conductivity l @ 90°C	1.20 W m ⁻¹ K ⁻¹
Refractive index	nd 1.484
Stress-optical co-efficient	3l2.10 ⁻⁶
Hydrolytic Resistance (DIN ISO 719)	Class 1
Acid Resistance(DIN 12116)	Class 1
Alkali Resistance (DIN ISO 695)	Class 2