

AL01 ALUMINOSILICATE

This material (Alkali-free Aluminosilicate) has been specially selected for the manufacture of flat gauge glasses intended for high temperature applications

Glasses are available in Reflex (Prism), Transparent (Plain), and High pressure types

Custom made glasses to complement the standard sizes are also available

Contact us for availability and pressure/temperature ratings

TYPICAL PROPERTIES

Thermal expansion (20-300° C) α	= 4.7×10^{-6} K
Transformation Temperature Tg	= 715° C
Strain Point Tc	= 688° C
Softening Temperature Mg	> 910° C
Thermal Shock Δ	= 300° C
Bending Strength Mpa	> 200
Composition (wt %)	
	SiO ₂ ~60.0
	Al ₂ O ₃ ~15.0
	B ₂ O ₃ ~ 7.0
	ZrO ₂ ~ Trace
	RO ~ 18.0 (R ²⁺ =Mg ²⁺ .Ba ²⁺ .Ca ²⁺)
Hydrolytic Resistance (DIN ISO 719)	Class 1
Acid Resistance (DIN 12116)	Class 3
Alkali Resistance (DIN ISO 695)	Class 3
Application Data (Standard 34mm x 17.5mm section)	
Saturated steam and alkaline solutions with significant glass attack must use mica protection	
Maximum temperature	400° C (752° F)
Maximum pressure	22752 kPa (3300 psig)
Applications with no significant glass attack	
	@ 36° C 34474 kPa (5000 psig)
	@ 427° C 20684 kPa (3000 psig)