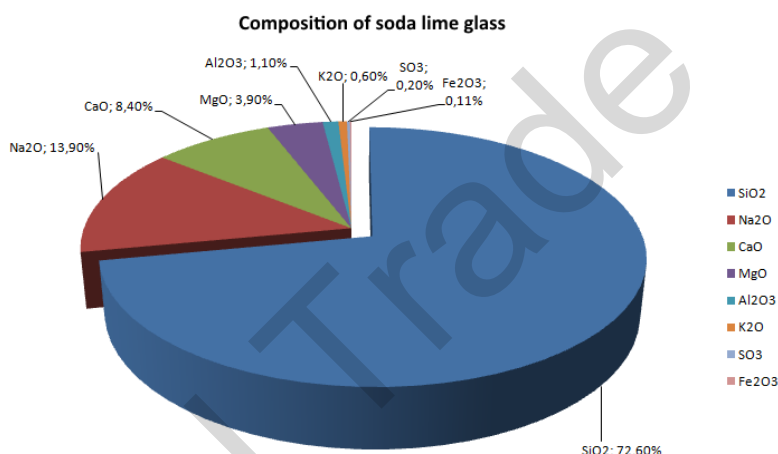


Soda-lime glass properties

Glass relatively inexpensive and readily available, with a wide range of applications. Due to the high thermal expansion coefficient has a low resistance to sudden changes in temperature..

Composition

SiO ₂	72,60%
Na ₂ O	13,90%
CaO	8,40%
MgO	3,90%
Al ₂ O ₃	1,10%
K ₂ O	0,60%
SO ₃	0,20%
Fe ₂ O ₃	0,11%



Flexural strength

Annealed	41 MPa
Heat-Strengthened	83 Mpa
Toughened	165 MPa

Compressive strength

Annealed	19 MPa
Heat-Strengthened	39 Mpa
Toughened	77 MPa

Properties

Density (@ 18 °C)	2 500 kg/m ³
Mohs hardness	5 - 6
Modulus of elasticity (Young's)	72 GPa
Shear modulus	30 GPa
Poisson's ratio	0,23
Coefficient of thermal stress	0,62 MPa/°C
Thermal conductivity	0,937 W/(m K)
Specific heat	0,88 kJ/(kg K)
Coefficient of linear expansion	8,3 * 10 ⁻⁶ °C
Index of refraction (@ 380 - 780 nm)	1.5
Softening point	715 °C
Annealing point	548 °C
Max. working temperature:	
- not toughened	110 °C
- toughened	150 °C
Thermal shock Δ :	
- not toughened	50 °C
- toughened	118 °C