



COLORLESS GLASS TECHNICAL DATA SHEET

USP-1 glass is neutral borosilicate glass with high content of boron having both high thermal and chemical resistance. Glass is meant for glass tube production and corresponds to technical specifications 00480945-002-96 Neutral borosilicate medical glass.

Water resistance of neutral borosilicate medical glass corresponds to **HGA1 ISO 720**.

Alkali resistance of neutral borosilicate medical glass corresponds to class 2 of **National State Standard 19810**.

These characteristics allow to use neutral borosilicate medical glass for medical packing production to ensure long and safe storing of medicines.

Chemical Composition of Neutral Borosilicate Medical Glass

Components	Contents in the mass shares, %
SiO ₂	74.20
B ₂ O ₃	8.50
Na ₂ O	7.90
Al ₂ O ₃	6.00
Sum CaO, MgO	2.60
K ₂ O	0.50

Physical and Chemical Parameters of Neutral Borosilicate Medical Glass

Description of the Goods	Unit of measurement	Value
Thermal resistance, not less	°C	170
Coefficient of linear thermal expansion in the temperature range of (20 - 300) C °	$\alpha \times 10^{-6} \text{degree}^{-1}$	5,5 - 6,5
Densiity	g/cm ³	2,35-2,37
Water resistance, not more	mg Na ₂ O by 1 g of glass	0,035
Alkali resistance, not more	mg/dm ²	120