Walter Stern, Inc

TECHNICAL INFORMATION
GLASS BALLS - BOROSILICATE

Manufacturing Process ..... Rods, blown and pressed
Linear Expansion Coefficient within Range 20-300° C ..... ($10^{-6}K^{-1}$) 3.3±0.1
Transformation-Temperature according DIN 52324 ..... 530° C

Viscosity (Poise): Low Degree of Cooling ..... 510° C
High Degree of Cooling ..... 568° C
Softening Point ..... 815° C
Processing Temperature ..... 1264° C
Density ..... 2,23 g/cm³
Temperature-Change-Constant
according DIN 52325 ..... 250° C
Module of Elasticity 6,3 E-10-⁵kp/cm²

Heat Conduction at 20° C ..... $1{,}00 \frac{kcal}{m\ h}$ grd

Electric Properties: Temperature for 0-108 Ohm-cm ..... 248° C
Specific Electric Resistance ..... Constant of Equation
$-1{,}44\ A + \frac{B}{T}$ Absolute Temperature 4,91° K-B-10^3

Dielectric Constant 4,6 at 1 MHz and 25° C
Dielectric Loss Angle 55 at 1 MHz and 25° C
Point of Refraction (for the He-line d) ..... 1,473 $^n d$

Chemical Properties: Resistance to Water according DIN 12111
in 0,01 n HCl/g Glass Granules 0,026

Resistance to Water, figured as equivalent
Na 2 0/g Glass Granules 0,008

Hydrolitical Class: 1
Resistance to Acid according DIN 52322
in mg Weight Loss/100 cm² 0,35

Acidity Class: 1
Resistance to Alkaline according DIN 52322
in mg. Weight Loss/100 cm² 134

Alkaline Class: 2

Diameter & Sphericity Variation ..... Maximum ± 10% of Glass Ball Diameter

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