RUHRLAND
STOPFBÜCHSEN PACKUNG GMBH

MADE IN GERMANY

MATERIAL DATA SHEET

E-GLASS

PHYSICAL CHARACTERISTICS

DENSITY	2,6 g/cm³
TENSILE STRENGTH	3400 - 3700 N/mm²
BREAKING ELONGATION	3,3 - 4,8 %
COEFFICIENT OF THERMAL EXPANSION	5
THERMAL CONDUCTIVITY COEFFICIENT TEXTILES	0,85 - 1,0 W/{m*K]
RELATIVE PERMITTIVITY	5,8 - 6,7
ELECTRIC SPEC. RESISTANCE ('Ω*cm {20°C})	10^{15}
ELECTRIC SPEC. RESISTANCE ('Ω*cm {250°C})	10^{13}
ELECTRIC SPEC. RESISTANCE ('Ω*cm {450°C})	10^{11}
TEMP. RESISTANCE *	550 °C
SOFTENING TEMP.	840 °C

**With the evaluation of the temperature resistance, the influence of the medium and the type of stressing are of decisive importance.*

COMPOSITION // UTILIZATION

E-glass: Aluminum boron silicate
Static sealing for high temperatures.

CHEMICAL RESISTANCE

The thermoglass products on the basis of E-glass are resistant against oils, grease, solvents, air, vapors, gases, and organic acids

In case of the influence of inorganic acids - excluding hydrofluoric acid and phosphoric acid - products of C-glass are to be used. In accordance with DIN 12111, materials are subdivided into hydrolytic classes according to their resistance against water.
E-glass was classified into Class I (best class).

E-glass is characterized by a high load-carrying capacity and excellent electrical-insulating properties. E-glass products are produced both from continuous-fiber yarn and from textured and twisted yarn. The texturing considerably improves the insulation characteristics of the finished products.

CHEMICAL COMPOSITION

SiO_2	approx. 52 – 56 %
CaO	approx. 16 – 25 %
AL_2O_3	approx. 12 – 16 %
B_2O_3	approx. 5 – 10 %
MgO	approx. 0 – 5 %

Rest: Traces of TiO_2 // Fe_2O_3 // Cr_2O_3 // F_2 // R_2O // K_2O // Na_2O // MnO // P_2O_5 // SO_2

Tolerances reserved!