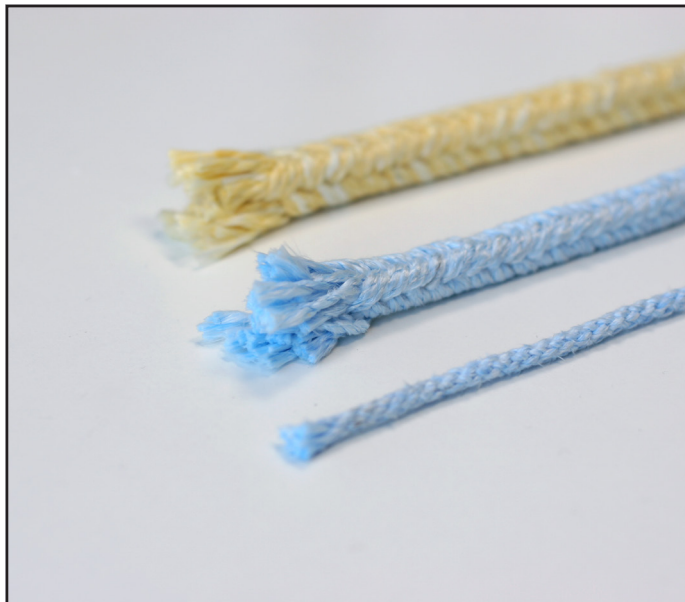




MATERIAL DATA SHEET

HT-GLASS-FIBER



- Heat and refrigeration resistant
- High chemical resistance
- Resistant to swelling
- Harmless to health (fiber diameter $\geq 6 \mu\text{m}$)

COMPOSITION // UTILIZATION

HT glass-fiber products consist of calcium-silicate fibers and are manufactured of textured and twisted filament yarns.

The insulating effect and abrasion resistance are considerably improved by the texturing and additional twisting. HT products are manufactured exclusively of yarns with a filament diameter of $\geq 6 \mu\text{m}$. They are thus outside of the range of health-endangering fibers. Investigations carried out by TH Aachen and BIA (Professional Institute for Occupational Safety) verify that HT products are harmless to health.

PROPERTIES

- High abrasion resistance
- Good insulating characteristic through low heat storage capacity
- Very good electrical insulating characteristics
- Resistant against oils, greases, solvents and most acids & caustic solutions (excluded phosphoric acid and hydrofluoric acid, as well as strong caustic solutions)
- Easy to coat and impregnate
- Good cutting strength
- Rot-resistant

Since all parameters indicated in this catalog represent only rough values concerning characteristics, specification and applications, and can influence each other mutually, the specific application in each case should not be carried out without independent testing and evaluation. All technical information and recommendations are based on experience acquired to date.

CHEMICAL COMPOSITION

SiO ₂	54-62 %
CaO	17-25 %
Al ₂ O ₃	9-15 %
MgO	0-4 %
ZnO	0-5 %
TiO	0-4 %

Residue: Traces of Fe₂O₃ // F₂ // R₂O // K₂O // Na₂O // MnO // P₂O₅

PHYSICAL CHARACTERISTICS

MATERIAL DENSITY (FIBERS)	2.72 g/cm ³
TENSILE STRENGTH	3400 - 3700 N/mm ²
BREAKING ELONGATION	3.3 - 4.8%
TEMPERATURE RESISTANCE ¹⁾	750°C
SOFTENING TEMPERATURE (ASTM C338)	916°C
COMBUSTION CHARACTERISTICS	non-inflammable
MOISTURE (105°C/1H)	≤ 1%
IGNITION LOSS (750°C/1H)	≤ 2%
SHRINKAGE (750°C/24H)	≤ 2%
SMOOTH	≤ 2%

¹⁾ With the evaluation of the temperature resistance, the influence of the medium and the type of stressing are of decisive importance.

Due to these characteristics, HT products have proved themselves to be exceptional in the heat-protection and insulating area in case of mechanical stressing.

Errors on the selection of sealing can lead to damage. Specifications concerning characteristics, specification and applications are implemented subject to unannounced future changes. RUHRLAND STOPFBÜCHSEN PACKUNG GmbH does not assume any liability of any type.