

MATERIAL DATA SHEET

HAKOTHERM®-800

Hakotherm®-800 products are produced from high-quality calcium-silicate fibres. Calcium-silicate-fibres stand out by high thermal stability, excellent insulation properties and chemical properties.

Hakotherm®-800 products are used for special applications with high thermal and chemical resistance, e.g. for thermal and acoustic insulation in exhaust systems.

Hakotherm®-800 products are resistant against oils, fats, solvents and organic acids.

chemical components:

SiO ₂	[%]	54-62
CaO	[%]	17-25
Al ₂ O ₃	[%]	9- 5
MgO	[%]	0-4
ZnO	[%]	0-5
TiO	[%]	0-4
miscellaneous:		Fe ₂ O ₃ , F ₂ , R ₂ O, K ₂ O, Na ₂ O, MnO, P ₂ O ₅

Physical properties

density (fibres)	[g/cm ³] / [Lb/in ³]	2,72 / 0,099
tensile strength	[N/mm ²] / [KSi]	3400-3700 / 493-537
elongation at break	[%]	3,3-4,8
temperature resistance ¹⁾	[°C] / [°F]	750 / 1382
softening point [ASTM C338]	[°C] / [°F]	916 / 1681
moisture content [105°C (221°F)/2h]	[%]	≤ 1
loss on ignition [750°C (1382°F)/1h]	[%]	≤ 2
shrinkage [750°C (1382°F)/4h]	[%]	≤ 2
size content	[%]	≤ 2
combustion behaviour		incombustible

¹⁾ The influence of medium and type of stress are decisive for evaluating the temperature resistance during the application.

Properties

root-proof

resistant to swelling

resistant to heat and cold

high chemical resistance

no healthy hazards (filament diameter ≥ 6 micron)

We supply Hakotherm®-800 products in form of:

cut fibres needle mats stamped parts fabrics

Subject to tolerances!

Fibres with a diameter of ≥ 6 micron are –according to the present state of knowledge of labour medicine- to be considered as harmless to health.

Our Hakotherm®-800-products are made from continuous filaments with a diameter of ≥ 6 micron and exceed consequently the critical diameter range of 3 micron by far.