kwark® GS

Product Data Sheet

Kwark® GS is a high performance silica aerogel granule developed and produced by Enersens. This innovative granule is ideal for those looking to develop high thermal performance renders, plasters or mortars and high added value products. The exceptional properties of Kwark® allow it to be used for building and construction applications, offering functional advantages such as high thermal insulating, improving thermal comfort, eliminating thermal bridges, improving energy efficiency, fire resistance and prevention of condensation and humidity.

Advantages

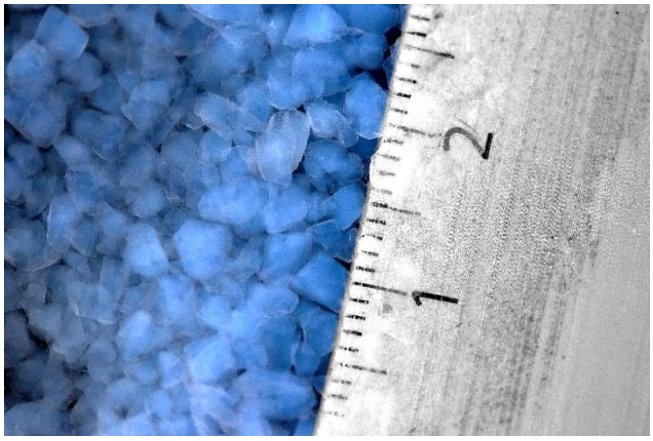
Ultra-low thermal conductivity

Hydrophobic and breathable

Lightweight

Translucent material

Non-flammable and durable material



Main characteristics

Thermal conductivity (intrinsic) at P_{atm}	13 mW/m.K^{-1} at 20°C
Operating temperature (to keep hydrophobicity)	-195°C to 450°C
Operating temperature (to keep insulation in dry atmosphere)	-195°C to 800°C
Particle size range	From 10 to 1250 µm
Apparent density	60 to 90 kg/m^3
Acoustic property (500-6400 Hz frequency)	+ 50% of absorption coefficient
Surface chemistry	Hydrophobic - Corrosion resistant
Pores diameter	5 to 12 nm
Mercury porosity	90 to 98%
Specific surface (N_2 BET)	750 to 950 m^2/g
pH stability range	3.0 to 6.5 *
Minimum ignition temperature	470°C
Heat capacity at 20°C (Cp)	1582 J/kg.K^{-1}
Resistivity	5.9x10^{13} Ω.m
Emissivity	0.93

* for values out of range contact us

ENERSENS absolute insulation

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