



# Siltherm Granulate

## Granular Microporous Insulation

Siltherm Granulate is a specially developed pourable microporous insulation product with exceptional flow characteristics.

It is an opacified blend of pyrogenic silica with a granular composition making it ideal for filling voids and complex shapes effectively and efficiently.

Siltherm Granulate can be a superb choice for applications like complex shapes, voids or closed joints where conventional insulation or rigid microporous insulation can not be applied.

### Features and Benefits

- Extremely low thermal conductivity over a wide temperature range
- High thermal stability
- Low shrinkage
- Low in weight
- Suitable for automated feeding systems
- Responsive to low frequency vibration feeding systems
- Inorganic and non-combustible
- No harmful respirable fibres
- Environmentally friendly
- Resistant to most chemicals

### Typical Applications

- **Chimneys**  
Twin wall chimney systems
- **Fuel Cells**  
Around BOP
- **Kilns and Furnaces**  
In the base of complex kiln car constructions
- **General**  
Where complex voids need to be insulated effectively and fully but where access is limited



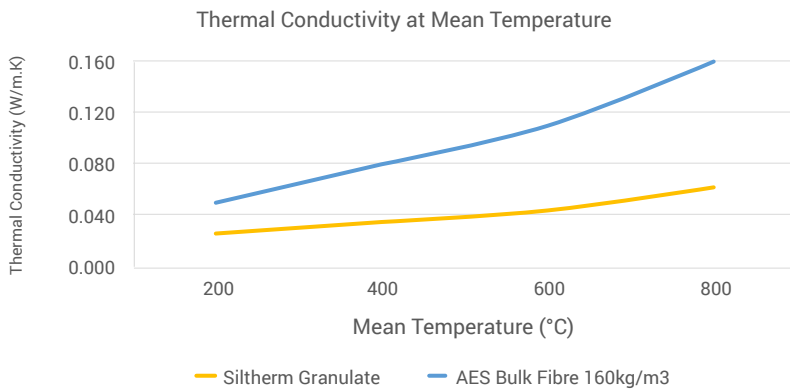
## Technical Specification

<b>Product Granulate</b>			
Classification Temperature		°C	1000
Nominal Density		kg/m <sup>3</sup>	230
Tapped Density		kg/m <sup>3</sup>	280
Thermal Conductivity	200 °C	W/m.K	0.026
	400 °C	W/m.K	0.035
	600 °C	W/m.K	0.044
	800 °C	W/m.K	0.062
Specific Heat Capacity	200 °C	kJ/kg.K	0.96
	400 °C	kJ/kg.K	1.02
	600 °C	kJ/kg.K	1.08
	800 °C	kJ/kg.K	1.12
Linear Shrinkage	24h full soak @ 850 °C	%	≤0.5
Linear Shrinkage	24h full soak @ 950 °C	%	≤2.5

## Standard Dimension and Format Availability\*

<b>Product Granulate</b>	<b>Particle Size (mm)</b>	<b>Density Tolerance (kg/m<sup>3</sup>)</b>
	0.3-2.5	±30
<b>Package (kg / bag)</b>	5, 10	

\* Specific packaging available upon request



## Siltherm products offer a realistic alternative to other lightweight insulations

Siltherm granulate offers a *realistic alternative* to other loose fill insulations such as vermiculite or fibre and wool based bulks.

The thermal resistance provided by Siltherm products is a cost *competitive alternative* to these loose fill solutions whilst also delivering benefits in terms of space optimisation and reduced weight.



The values given in this datasheet are typical and subject to normal manufacturing variation, they are for guidance only and maybe subject to change without notice. Recommendations for use are not intended to, and do not constitute a warranty, express or implied, of the suitability of the product for a particular use. The user is responsible for determining the suitability of Siltherm products for each application.

## SILTHERM

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Siltherm Group Holdings Ltd maintains a Quality Management System to: **ISO 9001: 2015 Certificate Registration Number CN-00219Q20582R1S**  
IQNet Certificate Issued by CQM for scope 'Research and development, production and after-sales service of nano thermal insulation materials'