



# Siltherm Granulate

## Granular Microporous Insulation



1000°C

**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 geometries 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.

Siltherm granulate offers a realistic alternative to other loose fill insulations such as vermiculite, perlite 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.

### Features and Benefits

Microporous insulation offers considerable and measurable advantages in terms of thermal management, energy efficiency and reduction of carbon footprint; the integration of microporous insulation in your heat containment systems and equipment provides a set of unique and measurable assets which impact at environmental, operational, social, economic and strategic levels like no other insulation can.

#### Features

- Extremely low thermal conductivity over a wide temperature range and up to its classification temperature.
- High thermal stability over time, no ageing effect.
- Low shrinkage.
- Low in weight.
- Thermal shock resistant.
- Inorganic and non-combustible.
- No harmful respirable fibres.
- Environmentally friendly.
- Resistant to most chemicals.

#### Benefits

- Allows more freedom in engineering at the design stage.
- Suitable for automated feeding systems.
- Responsive to low frequency vibration feeding systems.
- Increases capacity of existing equipment or reduces external space and weight.
- Reduces carbon footprint and energy consumption.
- Conserves and stores energy, improving efficiency.
- Valid economic alternative to complex machined components.
- Contributes to a safer working environment.

### Typical Applications

#### As backup insulation in:

- **Chimneys:** thin wall chimney systems; pipe-in-pipe fire protection and anti radiation of chimneys roof penetrations.
- **Renewables:** around BOP or as filler of geometrically complex stacks.
- **General Purpose:** where complex voids need to be insulated effectively and fully but where access is limited or as more cost competitive alternative to customized and machined insulation.





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## Technical Specification

CHARACTERISTICS	TEST METHOD	UNITS	GRADE 1000
<b>Classification Temperature</b>		°C	1000
<b>Nominal Density</b>			
Bulk Density		kg/m <sup>3</sup>	230
Tapped Density			280
<b>Thermal Conductivity <sup>1</sup></b>			
mean temperature of	200°C	ASTM C177	W/m•K
	400°C		
	600°C		
	800°C		
<b>Typical Granulometry</b>		mm	0.3 - 2.5
<b>Specific Heat Capacity</b>			
	200°C	kJ/kg•K	
	400°C		
	600°C		
	800°C		
<b>Linear Shrinkage</b>			
24 hr full soak	850°C	%	≤0.5
	950°C		
<b>Typical Chemical Composition</b>			
SiO <sub>2</sub>		%	
SiC			
Others			
Loss on Ignition, dry conditions			

<sup>1</sup> Tapped Density

## Format Availability and Tolerances

<b>Packaging <sup>2</sup></b>	Kg/bag	5-10
<b>Density Tolerances</b>	Kg	±30

<sup>2</sup> Specific packaging is available on demand

For environmental, health & safety information, please refer to our Material Safety Data Sheet.



ISO9001:2015  
CERTIFIED

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