

A close-up, vertical view of a textured, porous insulation material. The material has a light beige or off-white color with a complex, irregular surface structure consisting of many small, interconnected voids and solid particles, giving it a foamy or cellular appearance. The background is a soft, out-of-focus green, suggesting an outdoor setting.

INSUTE

The
Better
Insulation

BY
SUMTEQ
SMALL STRUCTURES. HIGH IMPACT.

We produce **unique polymer foams** with an ultra-fine structure.

Due to a pore size in the nanometer range, Insute stands out for its enormous insulation performance. By targeting industries that manufacture energy-saving and sustainable products based on our technology, Insute has found particular use in the construction industry as well as in technical insulation.

We are advancing sustainability and circularity by using eco-friendly blowing agents in the production process and implementing recycling strategies.

Thanks to its disruptive technology, Insute represents a new generation of insulation materials that is suitable for a wide range of applications. Its exceptional performance, breathability and compressive strength make it an optimal solution for insulation at the highest level.



Climate-friendly production



Durable in application



Recyclable



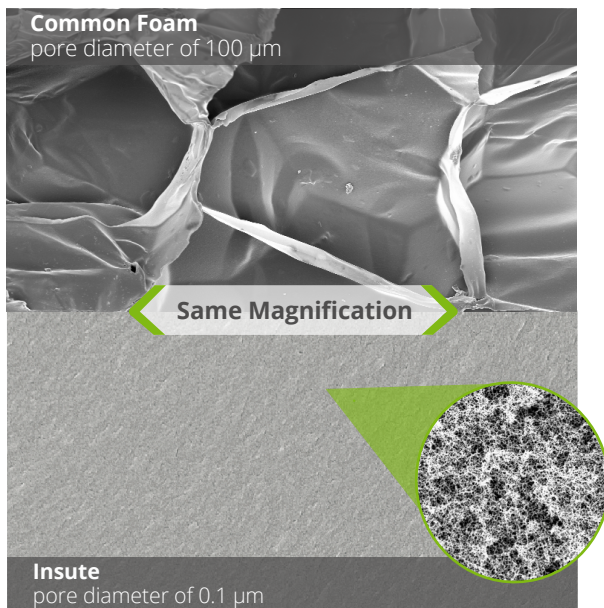
HIGHLY INSULATIVE.

EXTREMELY STABLE.

BREATHABLE.

Insute offers **exceptional thermal insulation** by reducing heat conduction to a minimum.

The technology is based on the effect that below a certain pore size gas molecules collide more frequently with the web of the material than with other gas molecules in the pores. This prevents the directional flow of heat via the enclosed cell gas.



Pore size smaller by factor 1,000 compared to conventional foams.

Insute's unique combination of properties makes it an ideal material for the construction sector. As it is open-pored and hydrophobic, Insute is impermeable to liquid water, but breathable at the same time.

Thanks to the small pores, Insute can be ground into different grain sizes while maintaining full performance. This is because even the finest particle contains millions of pores and thus millions of webs. The numerous webs give Insute exceptional strength and compressive properties. With all these qualities combined, Insute is the perfect solution for various product systems.

Technical Data

Material	Foamed acrylic copolymer
Temperature range	- 270 °C to + 80 °C
Pore size	Less than 0.1 µm
Appearance	Flakes *
Bulk density	70 - 100 kg/m ³
Pore structure	Open-cell / breathable
Mechanical stability	High / non-abrasive

* Individual sizes and sieve cuts available upon request

Especially where space is rare or complex shapes need to be insulated, our high-performance insulation material finds its application. With blow-in insulation, for example, even the smallest niches can be reached without destroying existing facades. But Insute is also an asset in technical insulation. From the insulation of gas tanks to pipelines, there are no limits.

Insulation Values in Application



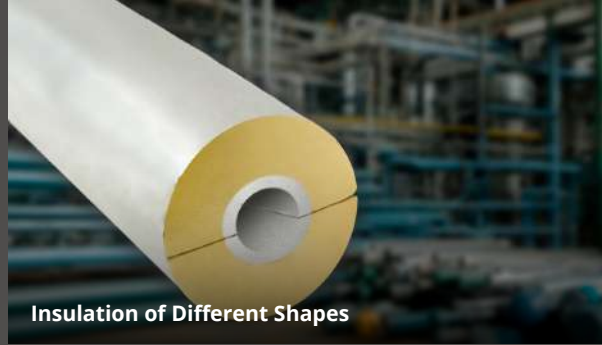
Blow-in Insulation
λ < 25 mW/mK



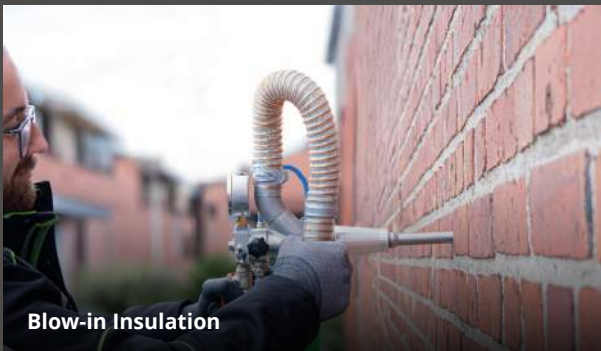
Insulation Plaster
λ < 40 mW/mK



Plaster



Insulation of Different Shapes



Blow-in Insulation



Thermo Containers and Flasks

Applications in Construction



Blow-in Insulation

Double-skin masonry walls, especially suitable for small cavities



Insulation Plaster

Refurbishment of old buildings and insulation of new constructions



Screed

Optimal balance of strength and insulation properties



Lightweight Concrete

The ideal solution for insulating walls, ceilings and further construction elements

Applications in Technical Insulation



Thermo Containers and Flasks

Spreads even in the smallest cavities thanks to adaptable particle size



Cooling and Freezing Units

Weight and space saving thanks to high insulation effect



Insulation of Different Shapes

Flexibly applicable to round bodies, such as pipes



Liquid Gas Tanks for Storage and Transport

Insulation for limited cavities and special forms



Isolastr. 2 | 52353 | Dueren

+ 49 2421 99012 0

info@sumteq.com

www.sumteq.com

SUMTEQ GmbH

