

ORYZA-SIL-650

Oryza Aerogel Blanket is a flexible thermal insulation material made of aerogel and a variety of reinforcing fibers through a special manufacturing process.

This product is widely used in industrial pipelines, petroleum/petrochemical industry, home appliances, construction and others, because of its excellent performance in energy saving and emission reduction.



Specific advantages are as follows:

- Low dust aerogel
- Excellent thermal insulation performance
- Stable performance
- Fire resistance in grade A1
- Easy to construct; increase the effectiveness of space usage
- Durable and longevity
- Safe and environmentally friendly



Tested according to ASTM C1728 - Standard Specification for Flexible Aerogel Insulation

- ASTM 1763-B Water absorption
- ASTM C165 Compression test
- ASTM C303 Classification of thickness and density
- ASTM C356 Linear shrinkage under soaking heat
- ASTM C1101 Classification of flexibility
- ASTM C1104 Water vapor sorption
- ASTM C411 Hot Surface Performance
- ASTM E84 Surface burning characteristics
- ASTM 871 and ASTM C795 Leachable Ions and pH
- ASTM D5116-15 Environmental Organic Emission
- ASTM D5116-15 Prohibited Substance

Other tests

- EN 12667 Thermal conductivity
- BS 476 Part 4 Fire Test on Building Material
- ISO 22899 Performance in Jet-fire
- GB/T 17393-2008 Stress Corrosion Test On Austenitic Stainless Steel
- Crystallinity Study of fibers
- GB/T 34336-2017 Nanoporous aerogel products for thermal insulation
- GB 8624-2012 Classification for burning behaviour of building material
- ISO 15665 Acoustics - Acoustic insulation for pipes, valves and flanges

TECHNICAL PARAMETERS

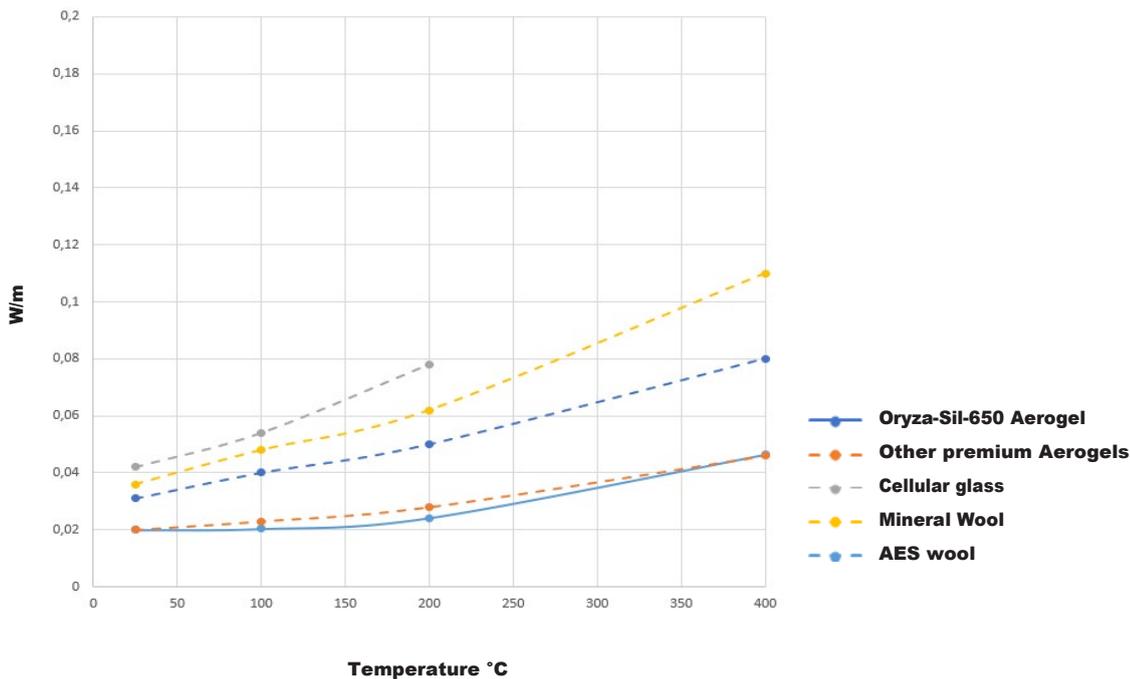
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Industry Applications

Oil & Gas - Refineries, Aerospace,
Marine, Transportation,
Cryogenic Insulation

Nominal Thickness	3 mm, 5 mm, 10 mm, 20 mm
Density	165 kg/m³
Operational Temperature	-196°C ~ 650°C
Fire Rating	A1
Thermal Conductivity W/mK	0.012–0.020

Thermal Conductivity comparison



Key selling points

- Low dust emission
- High thermal performance
- High temperature resistance
- Non flammable, fire resistance grade A1
- Extremely hydrophobic and breathable
 - CUI mitigating
- Slim insulation thickness
- Soft and easy to install on small dimension piping

