



# REFIAL<sup>®</sup>-AEROMAT

## Microporous Aerogel insulation mats

REFIAL<sup>®</sup>-AEROMAT is a high-temperature insulation mat, based on a microporous gel and reinforced with a non-woven, glass-fiber batting. REFIAL<sup>®</sup>-AEROMAT has the lowest thermal conductivity of any known solid.

REFIAL<sup>®</sup>-AEROMAT has a maximum application temperature of +650°C and a density of around de 190 kg/m<sup>3</sup> (±15 kg/m<sup>3</sup>)

REFIAL<sup>®</sup>-AEROMAT is a flexible, environmentally safe and easy to use insulation blanket, ideal for insulating piping, vessels, tanks, and equipment.

REFIAL<sup>®</sup>-AEROMAT can be used for oil refineries, chemical industry, power stations, piping solutions, and insulation for all kind of equipment, aeronautics, ....

REFIAL<sup>®</sup>-AEROMAT is available in standard thickness of 3,6 and 10 mm.

### Technical data

Brand	REFIAL <sup>®</sup> -AEROMAT HT650
Colour	White/Beige
Maximum application temperature	650°C
Recommended Service Temperature °C	100°C -550°C
Linear shrinkage under soaking heat	≤ 2% in width and Length
Density ( kg/m <sup>3</sup> )	190 kg/m <sup>3</sup> ( ±15 kg/m <sup>3</sup> )
Compressive Strength @10% reduction in thickness	20,7 KPa
Tensile Strength	1000 KPa
Hydrophobicity	≥ 98%
Mass hygroscopicity	≤ 5%
Water absorption at room temperature	± 8%
Water vapour absorption ( at room	< 5% by weight
Stress corrosion cracking-ASTM C692, ASTM C795	Insulation for use over austenitic steel: no cracks, passed
Corrosiveness of steel – ASTM C1617, procedure A	Passed, mass loss corrosion Rate ( MLCR) not exceeding that of 5 ppm chloride solution on a carbon steel coupon
Weather resistance	In all industrial applications, the outer layer of the insulation must be protected with an adequate covering like metal jacketing.
Health aspects	Neutral, MSDS available on request
Fungal resistance	No growth
Loss on Ignition	≤ 5%
Thickness	3-6-10 mm
Width	1500 mm ± 5 mm
Length m/roll	36 m (3 mm) – 36 m (6 mm) – 36 m (10 mm)

Length and special sizes can be customized in our in-house workshop, according to your drawings

### Thermal conductivity

Mean Temp. °C	25	200	300	400	500	650
W/mK	0,021	0,028	0,035	0,045	0,072	0,095



## Features and Benefits

- Extremely low thermal conductivity over a wide temperature range
- 4-5 times better performance than conventional insulation
- High thermal stability
- Low in weight
- Inorganic and non-combustible
- Shock and vibration resistant
- Quick and easy to install
- Space saving in and around congested areas or closely spaced pipe clusters.
- Breathable hydrophobic flexible blanket that will not crack and will retain its integrity throughout high temperature service
- Can be re fitted after removal and inspection
- Slim and fitted insulation thickness
- Flexible and versatile shapes choices
- Environmentally friendly
- No harmful respirable fibres



## Typical Applications

- Power Generation, Refining and chemical Processing Industries
- Process piping
- Vessels
- Storage tanks and equipment

Installation manual is available on request.



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