

REFIAL® -MPI Pipe

Rigid Microporous Insulation

REFIAL® -MPI Pipe are microporous half pipe shell insulation

REFIAL® -MPI Pipe insulation are based on inorganic materials, especially fumed silica and different opacifiers for minimizing infrared radiation.

REFIAL® -MPI Pipe are ready-made half pipes microporous Insulation and are available alternatively with glass cloth or aluminium foil covering. Special shapes can be milled according to customer specifications. They are also available in a totally hydrophobic version (up to 300°C). The half pipes are standard available up to 100 mm inner diameter, wall thickness 25 mm and length of 0,5 and 1 m.

Features and Benefits

- Extremely low thermal conductivity over a wide temperature range
- High thermal stability
- Low shrinkage
- Low in weight
- Wide range of sizes available to order
- Can be manufactured into fabricated elbows and bends
- Inorganic and non-combustible
- Simple to handle
- No harmful respirable fibres
- Environmentally friendly
- Resistant to most chemicals

Cutting and Fixing

REFIAL® -MPI Pipe microporous Insulation half pipes and shells can be shaped both manually with hand tools and with stationary wood processing machinery . The shells or half pipes can be cut , sawn and drilled . For insulation of pipes , the half pipes or shelves are installed with wire, straps and self-adhesive aluminium foil tape . On request , these shelves can also be custom made according to customer's specification

Typical Applications

- Half pipe Microporous Insulation or Ideal for the insulation of pipes .
- Energy producing industries, especially in power plant, refineries and lots of other applications, where pipe have to be insulated with most effective insulation materials
- Petrochemical industry & power generation
- CSP (Concentrated Solar power)
- Hot pipe support insulation
- Exhaust systems



Technical Data

Classification temperature (1)	1000°C	
Colour	Grey/beige/White	
Covering	Aluminium foil/E-glass fabric	
Nominal Density	280 kg/m ³	
Shrinkage at 950°C/24 hours	< 2,5%	
Fire classification according DIN 4102	Class A1 - non-combustible	
Thermal Conductivity @ (ASTM C 177 : 2013)	200°C 400°C 600°C 800°C	0,022 W/mK 0,023 W/mK 0,027 W/mK 0,034 W/mK
Specific Heat Capacity	200°C 400°C 600°C 800°C	0,86 KJ/kg.K 0,94 KJ/kg.K 0,96 KJ/kg.K 0,99 KJ/kg.K
Storage instruction	Can be stored without shelf life limitation . The material has to be stored in dry conditions.	

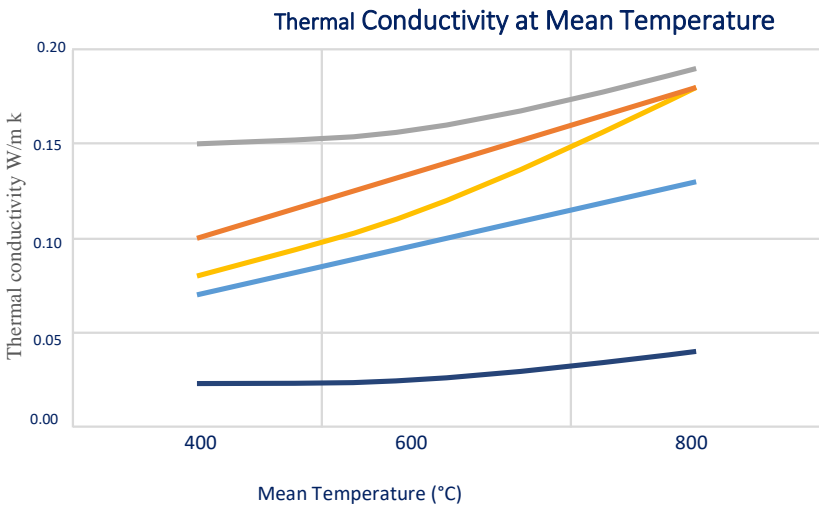
(1) Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications operational temperature limits may be significantly reduced. For assistance or clarification please contact REFALTEC office. info@refaltec.com

REFIAL® - MPI products reacts sensitively towards all wet materials such as water, oil, gasoline etc., as these materials destroy its pore structure). Therefore , special coverings and Hydrophobic grade are available, which makes the material insensitive to water and humidity (up to 300°C).

Dimension & Size Availability*

Product Type	Diameter (mm)	Thickness (mm)	Length (m)
REFIAL®-MPI Pipe	up to 127 mm inner diameter	25(±1)	0,5 (±3)

* Other sizes available upon request



REFIAL®-MPI products offer a realistic alternative to other lightweight insulations

REFIAL®-MPI products offer a realistic alternative compared to other lightweight insulation solutions, such as low density calcium silicate, vermiculite, fibre or wool based blankets and boards.

The thermal resistance provided by REFIAL®-MPI products is a cost competitive alternative to the other lightweight insulation solutions on the market, whilst also delivering benefits in terms of space optimization and reduced weight.



REFIAL® contains the right to change without notice the properties and values of all products. The given technical values are obtained in specific conditions and are average and indicative. Data is representative of production and are subject to normal production fluctuations, they should not be deemed to constitute or imply any warranty of performance, the user is held responsible for determining the suitability of the products for the given application. Errors and omissions excepted. In case of any doubt if these properties and/or values are matching the application requirements, please contact REFIAL® for advice.