## **Data Sheet**

# **ISOCON**





#### Characteristics

ISOCON is an insulating material based on a microporous core with a very low thermal conductivity, which means that it has very high thermal insulation properties. Specially designed for building applications, such us, cavity wall insulation, flat roofs or doors and windows and more. It is based mainly in pyrogenic silica, opacifiers to reduce radiation, and fibres as reinforcers. In order to make it easy to manipulate, the core is glued with high temperature adhesive (1000°C) and wrapped with aluminium foil. The foil also prevents the entering of liquids in the panel.



#### **Applications**

- Thermal insulation
- Passive fire protection



#### **Sectors**

Construction and Industry



#### **Geometry**

#### Standard dimensions

• 1100mm x 700mm x e • 1020mm x 615mm x e

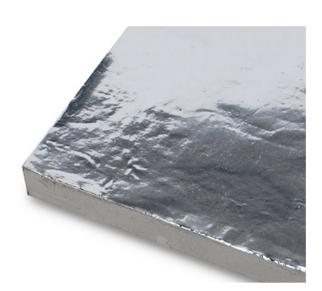
#### **Standard thicknesses**

5mm, 7mm,10mm,15mm,20mm,25mm,
30mm,35mm,40mm,45mm,50mm.



#### **Tolerances**

	Width (mm)	Length (mm)
STD (1100x700)	Max 715	Max 1120
STD (1020x615)	Max 630	Max 1040
Customized size	±3	±3
	Thickness (mm)	Tolerances
	5-10	±0,5
STD	10,1-30	±0,8
	30,1-50	±1,5





#### **Safety instructions**

The materials used are not dangerous for humans or environment following the European directive UE2006/1907/EEC. The fibres used in the core have a diameter  $>3\mu m$ .



#### Core composition (% depending on the applications)

SiO<sub>2</sub> (NON CRYSTALLINE) approx. 50-90%
SiC approx. 8-49%
Others approx. 1-6%



#### Lifespan

If properly stored, the lifespan of the panel has no expiring date. It is recommended to store the panel in a dry environment.







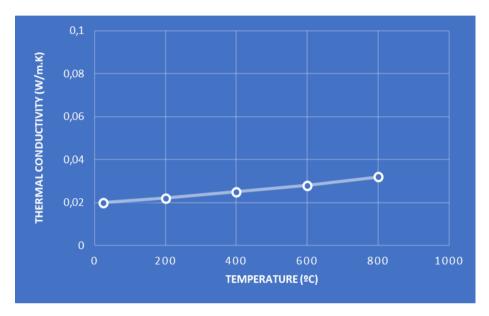
The information contained in this data sheet/brochure is intended to assist in designing with Isoleika products. It is not intended to and does not create any warranties, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose or that the results shown on this data sheet will be achieved by a user for a particular purpose. The user is responsible for determining the suitability of Isoleika products for each application.

www.isoleika.com isoleika@isoleika.es Version 1 ISOCON



Colour			grey
Density		kg/m³	270-320
Non combustibility test			classification A1
Compressive strength at 10% (ASTM C 165)		kPa	>360
Thermal conductivity (ISO 8302, ASTM C177)		W/m.K	0,020
Shrinkage (ISO2477)	one side 12h @1000ºC	%	<0,5
	At all sides 24h @1000ºC	%	<3

### Thermal conductivity graph (ISO 8302, ASTM C177)





Excellent thermal insulation



Non-combustible





Recyclable





Totally innocuous material







The information contained in this data sheet/brochure is intended to assist in designing with Isoleika products. It is not intended to and does not create any warranties, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose or that the results shown on this data sheet will be achieved by a user for a particular purpose. The user is responsible for determining the suitability of Isoleika products for each application.

www.isoleika.com isoleika@isoleika.es Version 1 ISOCON