INSULFRAX® PAPER

A recent addition to our fibres product range, INSULFRAX®, is a breakthrough in insulating materials technology. This high temperature vitreous wool has high solubility in simulated body fluids and hence carries no hazard classification.

Insulfrax Paper is manufactured by wet mixing Insulfrax Bulk with selected organic binders on specially developed continuous lines, offering a paper product with good handling strength, compressibility and flexibility.

Insulfrax Paper can be used in a wide range of applications as thermal insulation and are especially suited to use in gaskets and as a parting medium.

General characteristics

INSULFRAX® PAPER has these outstanding characteristics:
- High temperature stability (up to 1200°C);
- Good handling strength
- Excellent flexibility
- Easy to die-cut
- Good thermal and acoustic insulation properties

Typical Chemical analysis (fibre wt. %)	
SiO_2	61.0 – 67.0
CaO	27.0 – 33.0
MgO	2.5–6.5
Al_2O_3	< 1.0
Fe_2O_3	< 0.6
Loss on ignition	< 12 %

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 such applications, operational limits are generally significantly reduced. In these cases, please contact Insulcon for advice.

Typical product parameters

Physical properties

Colour	Blueish – white
Classification temp.	1200°C
Melting point	> 1330°C
Fibre Diameter	3.2 microns (mean)
Product Density (nominal)	150 kg/m^3
Tensile strength (as rec'd)	> 250 kPa

* Based on free (uncompressed) thickness

Thermal Conductivity Data (W/mK)

200°C Mean Temp.	0.061
400°C Mean Temp.	0.098
600°C Mean Temp.	0.149
800°C Mean Temp.	0.221

Permanent Linear Shrinkage 24 hour soak

1200°C	< 4.0 %

Where appropriate Physical Properties and Thermal Conductivity Data measured according to ENV 1094 –7:1994.

Typical applications
- Industrial and domestic appliance gasketing
- Non-ferrous ingot mould liners
- Aluminium transfer system back-up insulation
- Parting medium in induction furnaces
- Automotive heat shields