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**Unifrax Ltd.**

T: +44 (0)1744 88 7600

F: +44 (0)1744 88 9916

[www.unifrax.com](http://www.unifrax.com)

## DESCRIPTION

Insulfrax Board products are manufactured from Insulfrax alkaline earth silicate wool, blended with specially selected inorganic and organic binders to give rigid boards with exceptional characteristics. 110ZK is easy to cut and shape with standard tools. These boards exhibit high strength and rigidity coupled with excellent insulating performance and high temperature stability. 110LD is particularly suited to applications where reduced out-gassing and/or high definition mechanical machining are required. Insulfrax Board products are available in a wide range of sizes and thicknesses.

## GENERAL CHARACTERISTICS

Insulfrax Board products have the following outstanding characteristics:

- High temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Good handling strength
- Easy to cut with standard tools

## TYPICAL APPLICATIONS

- Hot gas duct linings
- Rigid high temperature gaskets and seals
- Heat shields
- Shapes for domestic appliances
- Molten metal transfer systems

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.

## TYPICAL PRODUCT PARAMETERS

| Insulfrax                                          | 110ZK       | 110LD       |
|----------------------------------------------------|-------------|-------------|
| <b>Typical Chemical Analysis (fibre wt. %)</b>     |             |             |
| SiO <sub>2</sub>                                   | 61.0 - 67.0 | 61.0 - 67.0 |
| CaO                                                | 27.0 - 33.0 | 27.0 - 33.0 |
| MgO                                                | 2.5 - 6.5   | 2.5 - 6.5   |
| Al <sub>2</sub> O <sub>3</sub>                     | <1.0        | <1.0        |
| Fe <sub>2</sub> O <sub>3</sub>                     | <0.6        | <0.6        |
| <b>Physical Properties</b>                         |             |             |
| Colour                                             | White / Tan | White / Tan |
| Melting Point (°C)                                 | >1330       | >1330       |
| Product Density (kg/m <sup>3</sup> )               | 360         | 270         |
| Modulus of Rupture (kPa)                           | >700        | >700        |
| Use Limit (°C) *                                   | 1100        | 1100        |
| Loss on Ignition (wt.%)                            | <9.0        | <7.0        |
| <b>Thermal Conductivity (W/mK)</b>                 |             |             |
| <b>Mean Temp.</b>                                  |             |             |
| 400 °C                                             | 0.10        | 0.07        |
| 600 °C                                             | 0.12        | 0.10        |
| 800 °C                                             | 0.15        | 0.14        |
| <b>Permanent Linear Shrinkage (%) 24 Hour Soak</b> |             |             |
| 1100 °C                                            | <4.0        | <4.0        |

\*Use limit refers to the maximum short term temperature limit. The maximum continuous use limit for boards depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office. Where appropriate Physical Properties data measured according to EN 1094-1.

## AVAILABILITY

| Thickness (mm)          | 110ZK | 110LD | Sheets per carton   | Sheets per pallet | Sheets per carton    | Sheets per pallet |
|-------------------------|-------|-------|---------------------|-------------------|----------------------|-------------------|
| <b>Sheet Dimensions</b> |       |       | <b>1000 x 610mm</b> |                   | <b>1250 x 1000mm</b> |                   |
| 3                       | ✓     |       | 32                  | 704               | 32                   | 352               |
| 5                       | ✓     | ✓     | 20                  | 440               | 20                   | 220               |
| 6                       | ✓     | ✓     | 16                  | 352               | 16                   | 176               |
| 10                      | ✓     | ✓     | 10                  | 220               | 10                   | 110               |
| 12                      | ✓     | ✓     | 8                   | 176               | 8                    | 88                |
| 15                      | ✓     | ✓     | 6                   | 132               | 6                    | 66                |
| 18                      | ✓     | ✓     | 5                   | 110               | 5                    | 55                |
| 20                      | ✓     | ✓     | 5                   | 110               | 5                    | 55                |
| 25                      | ✓     | ✓     | 4                   | 88                | 4                    | 44                |
| 30                      | ✓     | ✓     | 3                   | 68                | 3                    | 34                |
| 40                      | ✓     | ✓     | 2                   | 44                | 2                    | 22                |
| 50                      | ✓     | ✓     | 2                   | 44                | 2                    | 22                |
| 60                      |       | ✓     | 1                   | 32                | 1                    | 16                |
| 75                      |       | ✓     | 1                   | 22                | 1                    | 11                |

Other thicknesses / sizes may be available on request subject to minimum order requirements.

## HANDLING INFORMATION

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or use.

Supplied by:

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