# Fiberfrax® Castables




## DESCRIPTION

Fiberfrax Castables are insulation materials which are composed of Fiberfrax refractory ceramic fibres blended with hydraulic setting binders. Water is added to these dry mixes (on site) and mixed to produce a cement like consistency, which upon setting produces a strong, rigid insulating shape. These versatile products are designed for casting or ramming applications such as casting shapes, coatings, linings and general refractory repairs.

## GENERAL CHARACTERISTICS

Fiberfrax Castables have the following outstanding characteristics:

- High temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Resistance to erosion
- Molten aluminium wetting resistance

## TYPICAL APPLICATIONS

- Collector bar seals for aluminium reduction cells
- Lining of non-ferrous metal launder systems/casting ladles
- Lining of aluminium distributor troughs/pans
- Insulation for metal melting induction furnaces
- Repair of tin bath - Float glass production

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.

*Start saving energy now.*
*Contact your local distributor.*

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## TYPICAL PRODUCT PARAMETERS

| Fiberfrax | Castable KUB | Variform 110 |
|---|---|---|
| **Physical Properties** | | |
| Colour | Grey | Grey |
| Product Form | Dry Mix | Dry Mix |
| Use Limit (°C) * | 1100 | 1100 |
| Dry Density (kg/m³) | 1350-1550 | 800-1300 |
| **Thermal Conductivity (W/mK)** | | |
| **Mean Temp.** | | |
| 600 °C | 0.23 | 0.18 |
| 800 °C | 0.30 | 0.22 |
| 1000 °C | 0.38 | 0.27 |

*The maximum continuous limit temperature for these products depends upon application conditions. For certain applications operational 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.

## INSTALLATION & MIXING PROCEDURES

Fiberfrax Castables require the correct amount of water to be added slowly to the dry mix until the material is uniformly blended. Over mixing will cause fibre breakdown and should be avoided. Small batches can be mixed by hand. Use of a cement or paddle mixer is recommended for larger batches.

Castable KUB is installed by ramming or pumping (Details of pumping equipment can be obtained from your nearest Unifrax Office).

Variform 110 is designed for casting or ramming applications. It is easily poured or trowelled into place, tamping may help eliminate voids.

## WATER QUANTITIES

| | Water (litres) per bag |
|---|---|
| **Fiberfrax Castable KUB** | |
| for Ramming/Pumping | 7.00 |
| **Fiberfrax Variform 110** | |
| Required Dry Density (kg/m³) | |
| 800 | 21.00 |
| 950 | 16.00 |
| 1100 | 12.00 |
| 1300 | 9.00 |

## AVAILABILITY

| Fiberfrax | Castable KUB | Variform 110 |
|---|---|---|
| 20kg Bags | ✓ | ✓ |

### Shelf Life & Storage

Fiberfrax Castables can be stored for up to 6 months, if kept unopened in cool, dry conditions.

## 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:*