

## REFPAC™ 100 Refractory Applications

Fluidifier for silica fume  
containing castables

### 1 General Characteristics

**REFPAC™ 100** is a multicomponent active compound design to be used in conjunction with calcium-aluminate cements in refractory applications. This new generation of fluidifying agent was specifically developed for low to medium cement products containing 2-10% Silica fume.

**REFPAC™ 100** provides characteristics ideally suited for refractory applications where reliable performance is required across a range of refractory aggregates and where inherent raw material variations cause issues with traditional additive systems.

**REFPAC™ 100** ensures optimal installation characteristics and maximises castable performance in situ.

**REFPAC™ 100** has been tested in model castable systems up to 1500°C and displays no detrimental effects to castable performance and did not alter the fired physical properties of the castable system in comparison to standard additive systems.

### 2 Compatibility

**REFPAC™ 100** is used in place of the normal additive package used for dispersing silica fume based castables and is compatible with all standard accelerator and retarders used for refractory applications.

The use of **REFPAC™ 100** is recommended for medium and low cement applications and when matched with the correct rheologically optimised size distributions is suitable for vibration, self-flowing and pumping grade materials.

Laboratory trials are recommended prior to any industrial use.

### 3 Specifications

Appearance:	Fine Powder
Colour:	Off-White
Odour:	None
Specific Gravity:	2.70 – 2.80 g/cm <sup>3</sup>
Bulk Density:	1.05 – 1.15 g/cm <sup>3</sup>

#### Typical Chemical Analysis

Al <sub>2</sub> O <sub>3</sub>	58 – 65%
CaO	25 – 30%
SiO <sub>2</sub>	< 0.5%
K <sub>2</sub> O + Na <sub>2</sub> O	< 1.0%
LOI	7 – 13%

### 4 Dosage

The recommended dosage of **REFPAC™ 100** is 1.0% by weight of castable. It is recommended to replace all other dispersants & additives as well as the balance of 1% of the matrix.

### 5 Packaging & Storage

- Shelf Life: 12 months at 5-35°C in un-opened buckets or paper-sacks on shrink-wrapped pallets
- The product may absorb moisture if stored in high humidity environments
- Open bags should be resealed and used in a relatively short period of time.

*Kerneos reserve the right to modify the product characteristics as a function of manufacturing experience.*

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