

## Data Sheet

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### Kerasic

Kerasic is alumina bonded silicon carbide. The main problem with silicon carbide is that it oxidises to silica. The alumina bond reacts with the silica to form a mineral called mullite.

Kerasic is not as electrically conductive as other silicon carbide materials.

Kerasic is a very fine grained material which can be poured like thick cream.

Very detailed castings can be made with wall thicknesses down to 2mm. Plates have been made 300mm x 300mm x 5mm thick.

The surface texture is very smooth, and the abrasion resistance of fired parts is excellent. The strength increases with repeated firing. Kerasic does not couple with a 1,6kH induction field.

#### Chemical analysis (%)

SiC	58.0
Al <sub>2</sub> O <sub>3</sub>	34.0
SiO <sub>2</sub>	2.0
CaO	6.0

#### Physical Properties:

<b>Bulk Density:</b>	~2.60 g/cm <sup>3</sup>
<b>Cold Crushing Strength</b>	50 – 120 MPa

#### Preparation:

For Pouring add +14% water

For vibration casting add +9% up to +18% water will still work in delicate castings like element cages.

#### Setting time / Heat of hydration:

Between 1 – 3 hours depending on weather conditions.

#### Packaging:

25kg plastic bags.

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