



# Kaowool™ White Cement



Datasheet Code 5-7-17 E

# MSDS Code 104-9-EURO REACH

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#### **DESCRIPTION**

Kaowool<sup>TM</sup> White Cement is a high temperature, air setting cement for use mainly as a refractory surface coating, although generally used on Kaowool Ceramic Fibre Substrates it can also be used on porous materials such as Insulating Fire Brick and Insulating Concretes and will equally enhance their abrasive resistance. The cement sets to form a strong hard film, which develops a ceramics bond at high temperatures yet maintains excellent resistance to thermal shock. The maximum recommended surface temperature is 1400°C. It can also be used as an adhesive for ceramic fibre products.

#### **TYPE**

Air setting cement.

# **CLASSIFICATION TEMPERATURE**

1400°C

The maximum use temperature depends on the application. In case of doubt, refer to your local Morgan Thermal Ceramics distributor for advice.

#### **APPLICATIONS**

### Surface coating

At high temperature the cement forms a hard eggshell ceramic film on most clean and grease free surfaces. This film is completely stable. The majority of Kaowool Ceramic Fibre products may be coated with Kaowool White Cement as a protection against high gas velocities or against molten metal contact.

# Bonding

Kaowool White Cement is recommended as a high temperature adhesive to bond ceramic fibre products together, or to attach them to porous refractory surfaces such as insulating fire brick or insulating concretes.

# **APPLICATION PROCEDURE**

Kaowool White Cement can be applied by brushing, dipping or spraying. Surfaces should be free of grease, dirt and dust.

The coating thickness on solid surfaces should be as thin as possible, followed by drying at temperatures up to a maximum of 90°C.

The viscosity of the cement can be reduced, if required, by the addition of small quantities of clean tap water.





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#### Main properties

| Classification temperature                              | °C      | 1400      |
|---|---------|-----------|
|   |         |           |
| Properties Measured at Ambient Conditions (23°C/50% RH) |         |           |
| Colour  |         | white     |
| Density   | Kg/m3   | 1840-1950 |
| Compressive strength                                    | MPa     | 45        |
| High Temperature Performance                            |         |           |
| Specific heat capacity at 100-550°C                     | kJ/kg.K | 1.04-1.14 |
| Melting temperature after drying                        | °C      | 1760      |
| Permanent linear shrinkage after 24 hours at            |         |           |
| 1000°C  | %       | 2.15      |
| 1260°C  | %       | 3.2       |

**Availability and Packaging** 

Supplied in 5 litre (8.5kg) plastic containers. 5 litres will coat an area of approximately 2.5m<sup>2</sup> at a thickness of 2mm, (about 28 modules at a size of 300 x 300mm).

#### Notes

- 1. Kaowool White Cement is not a contact adhesive and is not recommended for use on smooth metal surfaces.
- 2. A special range of Veneering Cements and protective coatings have been produced, details of which can be found on the relevant data sheets.
- 3. Precautions should be taken against freezing.
- 4. The product has a shelf life of approximately 12 months for unopened tubs, stored correctly.