DESCRIPTION

Thermal Ceramics' refractory mortars are normally supplied as ready-to-use wet blends of finely-ground aggregates and special binders.

They develop good strength on air drying, forming strong joints and conferring an almost monolithic structure to the brickwork.

TYPE

Refractory air-setting mortars.

CLASSIFICATION TEMPERATURES

JM 2600:	1430°C
Blakite™:	1650°C
Blakite V:	1650°C
JM 3300:	1760°C

MAXIMUM CONTINUOUS USE TEMPERATURE

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

AVAILABLE TYPES

JM 2600:
This is an air-setting cement developed for use in lower-temperature applications, where a high-strength bond is required. It is recommended for mortaring insulating firebricks for operating temperatures up to 1430°C and can be used for both trowelled and dipped joints.

Blakite:
This is a highly refractory mortar, dark grey in colour, which has a high water-retention characteristic. It was specially developed for laying insulating firebricks but is also suitable for use with super-duty and high alumina dense refractory bricks, at operating temperatures up to 1650°C. It is supplied in a consistency suitable for shallow patching or trowelling but requires the addition of approximately 5% water for dipping. Blakite is a good choice as a single, general-purpose mortar on projects involving mainly insulating firebricks but also including some dense firebricks.

Blakite V:
This is the standard product with a harder consistency to be used to glue special refractory shapes and steel plates.

JM 3300:
A very highly refractory air-setting mortar suitable for laying JM 32 insulating firebricks, and high alumina dense refractory bricks and for operating temperatures up to 1760°C.

FEATURES

- Good workability, ideal plasticity and water retention
- Low drying and firing shrinkages
- High refractoriness
- High bonding strength
- Good resistance to chemical attack
- Stability of chemical components

APPLICATIONS

- For laying insulating firebricks, super-duty and high alumina dense refractory bricks
- Provide resistance to infiltration of air or hot gases
- Hobby and laboratory kilns
- Retard penetration of slag and molten metal into the joints

Product Information

MAIN PROPERTIES

		JM 2600	Blakite	Blakite V	JM 3300
• Classification (ASTM C-199-84)		Medium duty	Super duty	Super duty	Super duty
• Temperature limit (normal oxidizing conditions)	°C	1430	1650	1650	1760
Properties Measured at Ambient Conditions (23°C/50% RH)					
• Density (as applied)	kg/m^3	1700	1900	1950	2000
• Viscosity 'for guidance' (Thermal Ceramics method Cylinder Penetration)	mm	30	24	10	25
• Modulus of rupture (dried at 100°C)	MPa	12	20	21	28
High Temperature Performance*					
• Permanent linear change when dried	%	-3	-2.4	-2.3	-2
• Refractoriness (ASTM C-24-84)	PCE	23	33	33	34
Chemical Composition					
Al_2O_3	%	33.4	43.1	43.1	54.8
SiO_2	%	60.7	51.7	51.7	40.6
Fe_2O_3	%	1.3	1.2	1.2	0.9
TiO_2	%	1.2	1.0	1.0	0.6
CaO + MgO	%	0.3	0.2	0.2	0.2
$K_2O + Na_2O$	%	2.8	2.7	2.7	2.3
Quantity Required and Packaging					
• Quantity required to set 1000 bricks*	kg	180	200	n.a.	200

*Amount depends upon thickness of the joint and porosity of the brick. The figure given is for trowelled joint, approx 2mm thick.

JM 2600, Blakite, Blakite V and JM 3300 are delivered ready-to-use, in metal drums.
Dry JM 2600 and dry Blakite are available on request (subject to special technical requirements).

Standard packaging	JM2600	Blakite	Blakite V	JM 3300
12 metal drums of 50kg on pallet	X	X		X
40 metal drums of 20kg on pallet		X	X	

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