



DESCRIPTION

Thermal Ceramics refractory mortars are usually supplied as ready-mixed liquid mixtures of finely ground aggregate and special binders.

They gain good strength when air-drying, forming strong joints and an almost solid structure in brickwork construction.

TYPE

Fire-resistant air setting mortars

CLASSIFICATION TEMPERATURE

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

MAXIMUM CONSTANT USAGE TEMPERATURE

The maximum constant use temperature depends on the application. If in doubt, please contact your local Thermal Ceramics distributor.

AVAILABLE TYPES

JM 2600:

It is an air-curing cement, developed for use at lower temperatures where a high strength binder is required. It is recommended as a binder for refractory brick insulation at temperatures up to 1430°C; it can also be used for filling as well as for dipping joints.

Blakite:

It is a highly refractory mortar of a dark grey colour, which has the property of good water binding. It has been especially developed for laying of heat resistant insulating bricks, but it is also suitable for use with highly refractory and high alumina bricks at working temperatures up to 1650°C. It is produced in a consistency suitable for thin joints and filling but requires the addition of approximately 5% dipping water. Blakite is a good solution as a single mortar for general purpose applications in projects using mainly insulating refractory bricks and heavy refractory bricks.

Blakite V:

It is a standard product with increased density for bonding refractory fittings and steel plates.

JM 3300:

Highly refractory air-setting JM 32 mortar for laying insulating refractory bricks and high alumina refractory bricks for working temperatures up to 1760°C.

FEATURES

- Good workability, ideal plasticity, and water binding
- Low shrinkage on drying and firing
- Superior fire resistance
- High bond strength
- Good chemical resistance
- Stable chemical composition

APPLICATION

- Laying of heat resistant insulating bricks, high heat resistant bricks and high alumina bricks
- Providing resistance to air and hot gas permeation
- Amateur or laboratory firing furnaces
- Slowing down the penetration of slag and molten metals into welds

JM 2600/ BLAKITE / BLAKITE V/ JM 3300

Product details

GENERAL PARAMETERS

		JM 2BXI	Blakite	Blakite V	JM 3300
• Classification (ASTM C-199-84)		average load	high load	high load	high load
• Maximum temperature (normal oxidation conditions)	°C	1430	1650	1650	1760

Properties measured at ambient conditions (S3°C / RH 50%)

• Density (after application)	kg/m ³	1700	1900	1950	2000
• Viscosity (approximate) (Cylindrical permeation method Thermal Ceramics)	mm	30	24	10	25
• Bending strength (setting at 100°C)	MPa	12	20	21	28

Performance at high temperatures

• Constant linear shrinkage after annealing	%	-3	-2.4	-2.3	-2
• Fire resistance (ASTM C-24-84)	PCE	23	23	33	34

Chemical analysis

	%				
Al ₂ O ₃	%	33.4	43.1	43.1	54.8
SiO ₂	%	60.7	51.7	51.7	40.6
Fe ₂ O 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 ₂ O + Na ₂ O	%	2.8	2.7	2.7	2.3

Required quantity and packaging

• Quantity needed to lay 1000 bricks *	kg	180	200	n.a.	200
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* The quantity depends on the thickness of the joints and the porosity of the bricks. Information given is for filler joints of approx. 2mm thickness.

JM 2600, Blakite, Blakite V and JM 3300 are supplied in metal drums as ready-to-use products. Dry JM 2600 and dry Blakite are available on request (depending on specific technical requirements).

Standard packaging

	JM2BXI	Blakite	Blakite V	JM 3300
12 metal drums of 50 kg per pallet	X	X		X
40 metal drums of 50 kg per pallet		X	X	

The parameters given above are typical average values obtained in accordance with current test methods and are subject to normal variations during the production process. They are provided as technical support and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Your local Thermal Ceramics office will provide appropriate information in this regard.

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