

# Product Information Sheet

**Fiberfrax®**

## Burner Block Moldafrax® BBM-15 and BBM-16

### Introduction

Burner Block Moldafrax® BBM-15 and BBM-16 are produced by vacuum molding process in a mixture composed of different types of fibers (amorphous and polycrystalline fiber), fillers and binders for special high temperatures. This manufacturing process allows considerable flexibility in the shapes, thickness and hardness of materials.

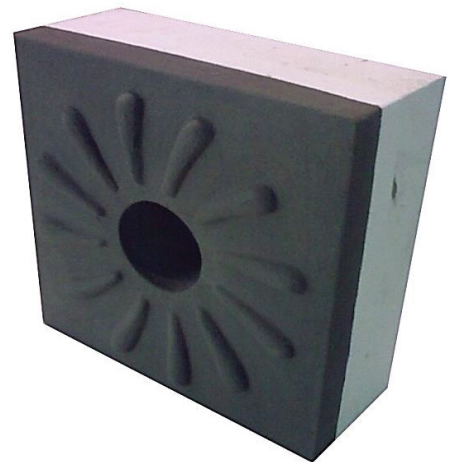
### The main advantages of vacuum molded parts, include:

- Stability at high temperatures,
- Low thermal conductivity
- Low heat storage,
- Low weight (5 x less when compared to refractory blocks),
- Longer service life,
- Inert to thermal shock,
- Excellent corrosion resistance,
- Produced according to design and customer requests.

### Mix

Molding compounds, vacuum using a small percentage of organic ligands, in addition to the inorganic. This gives the final product uniform hardness and density, as well as excellent resistance in operation and handling.

Fiberfrax® Silplate® Insulfrax® Fyre Wrap® Excelfrax® Saffil® Rigidfrax®



- Burner Block Moldafrax® BBM-15 and BBM-16 resist attack from most corrosive agents, with the exception of hydrofluoric acid, phosphoric acid and concentrated alkalis.
- If wet with water, steam or oil, its thermal and physical properties are completely restored after drying.
- Burner Block BBM-15 are manufactured according to customer design, in various formats / geometries.
- They can be supplied with or without surface protection coating in the region of incidence of the flame.



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## Burner Block Moldafrax® BBM-15 and BBM-16

Physical Properties	Unit.	BBM-15		Chemical Properties	Unit.	BBM-16		Chemical Properties	Unit.
Color	-	white / beige		Al <sub>2</sub> O <sub>3</sub>	%	gray		Al <sub>2</sub> O <sub>3</sub>	%
Temperature Class	°C	1500		SiO <sub>2</sub>		1600		SiO <sub>2</sub>	
Temp. Máx. Oper. Recom.	°C	1450		Na <sub>2</sub> O		1600		Na <sub>2</sub> O	
Melting Point	°C	1760		MgO		1800		MgO	
Density	kg/m³	430 to 570		Fe <sub>2</sub> O <sub>3</sub>		350 to 450		Fe <sub>2</sub> O <sub>3</sub>	
Especific Heat to 1093°C	J/kg.K	1172		LOI		1172		LOI	
Compression Resistance	PSI	5% @ 1092°C	10% @ 1092°C			5% @ 1092°C	10% @ 1092°C		
		31 PSI	34 PSI			32 PSI	36 PSI		
Linear shrinkage to 24 h	%	1450°C	1600°C			1600°C			
		2.7	3.5			2.7			
Thermal Conductivity ASTM-C-201	W/m.K	300°C	600°C	800°C	1200°C	300°C	600°C	800°C	1200°C
		0.080	0.130	0.180	0.348	0.085	0.137	0.191	0.367

### Comparative Lifetime:

Refractory Block (dense) X Moldafrax® BBM-15 e BBM-16 (Vacuum Formed Ceramic Fiber)



Burner Block in refractory  
2 years of use / weight: 140 kg



Burner Block BBM-15  
7 years of use / weight: 25 kg



Burner Block BBM-16  
17 years of use / weight: 27 kg

The temperature class of products Fiberfrax is determined by irreversible linear change criteria, not the melting point.

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