

Product Definition

Insulating Bricks and Slabs

Product :

140HSR

Other names :

Ref-date : 1999-C

Maximum Classified Temperature : **1 400 °C** Mark on the brick * : Brown

Brand Code : 8816

Description : Brick with insulating cordierite mullite, very high resistance at thermal shocks

Properties :	Standards	Units	Average μ	Std. Dev. s	Limits		
					Ti (lower)	Ts (upper)	
Classification :	ISO 2245						
Classification :	ASTM C155						
Bulk Density :	ISO 5016	g/cm ³	1.25	0.1		1.5	
Cold Crushing Strength : (// to extrusion or perpendicular to pressing direction)	ISO 8895	MPa	23	5	12		
Permanent Linear Change : 12h at 1400 °C	ISO 2477	%	-0.8		-1.8		
Chemical Analysis :	XRF	%					
			Al ₂ O ₃	48		45	
			SiO ₂	40			43
			Fe ₂ O ₃	1.1			1.5
			TiO ₂	0.3			0.5
			CaO+MgO Na ₂ O+K ₂ O	8.2 1.5			9.8 2
Thermal Conductivity : (Through 114 mm dimension)	ASTM C182	W/m.K					
			200 °C	0.65		0.85	
			400 °C	0.65		0.85	
			600 °C	0.65		0.85	
			800 °C	0.68		0.90	
			1 000 °C 1 200 °C	0.71		0.95	
Reversible Thermal Expansion : (20 °C to 1000 °C)	NF B40 308	%					
Pyroscopic Cone Equivalent :	ISO 528	°C					

Dimensional tolerances:	Standard Pieces	Non Standard Pieces
	Length Width Thickness Squareness	±1.5%, mini ±2mm ±1.5%, mini ±2mm ±1.5%, mini ±2mm 1mm / 100mm

Other Informations :	
Recommended Mortar :	Heatset : C 1500 S or C 1500 H (S = Dry, H = Ready to use) Airset : RL 40 S or RL 40 H or RL 26 H (S = Dry, H = Ready to use)
Manufacturing Plant :	LIBOS (F47500)

Physical properties are based on averages of routine quality controls carried out from bricks 230 x 114 x 64 mm or 230 x 114 x 76 mm.
Averages and standard deviations are indicative values, limits (Ti et Ts) are guaranteed values.

* The marking is not contractual.

Frequency, Sampling, Acceptation Methods are detailed in our C.T.C./Q.P.D. (Document n° 8030).