

# Product definition

Insulating Bricks and Slabs

Product : **TR 28-12**

Other names :

Ref-date : 2016-9

Maximum Classified Temperature : **1 500 °C** Mark on the brick \* : TR28-12

Brand code : 1183

Description: Refractory Kaolin enriched in alumina - Excellent crush resistance

Properties :	Standards	Units	Average μ	Std. Dev. S	Limits	
					Ti (lower)	Ts (upper)
Classification :	ISO 2245		150			
Classification :	ASTM C155		28			
Bulk density :	ISO 5016	g/cm <sup>3</sup>	1.3			1.42
Cold Crushing Strength : (// to extrusion or perpendicular to pressing direction)	ISO 8895	MPa	18		14	
Permanent Linear Change : 12h to 1350°C	ISO 2477	%	-1		-2	
Chemical analysis :	XRF	%				
	Al <sub>2</sub> O <sub>3</sub>		59		57	
	SiO <sub>2</sub>		36			
	Fe <sub>2</sub> O <sub>3</sub>		1.25			1.50
	TiO <sub>2</sub>		1.10			1.40
	CaO+MgO		1.30			1.70
	Na <sub>2</sub> O+K <sub>2</sub> O		1.10			1.70
Thermal Conductivity : (Through 114 mm dimension)	ASTM C182	W/m.K				
	200 °C		0.64			0.8
	400 °C		0.64			0.8
	600 °C		0.64			0.8
	800 °C		0.65			0.81
	1 000 °C		0.66			0.83
	1 200 °C		0.67			0.84
Reversible Thermal Expansion : (20°C to 1000°C)	NF B40 308	%	0,55			
Pyroscopic Cone Equivalent :	ISO 528	°C	1730			

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 :	Quality for MSA
Recommended mortar :	Heatset : TC 1600 S or TC 1600 H (S = Dry, H = Ready to use) Airset : TH 1600 S or TH 1600 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).