



Henson Ceramics Limited

Castle Works, Stafford ST16 2ET

HCL04A

HCL1100 SERIES

Materials comprising the HCL1100 series are porous, alumina formulations specially designed for refractory applications e.g. furnace linings, reaction vessels, batts and other kiln furniture.

Several compositions are available from 54% to 99.7% alumina content, affording high strength and good thermal insulation properties for applications ranging from 1400°C to 1800°C, respectively. Each of the materials is available in different densities, with open porosity ranging from about 20% to 80%.

PROPERTY	UNIT	HCL1191 (35)	HCL1191 (80)
COMPOSITION			
Alumina content	%	99.7	99.7
Inorganic balance (CaO / MgO)	%	0.3	0.3
Organic content	%	0	0
PHYSICAL			
Density	gcm ⁻³	2.4	0.5
Open Porosity	%	>35	> 80
Colour		White	White
Compressive Strength	MPa	> 100	> 40
THERMAL			
@ 500°C	Wm ⁻¹ K ⁻¹	5	0.2
@ 850°C	Wm ⁻¹ K ⁻¹	-	0.3
@ 1400°C	Wm ⁻¹ K ⁻¹	-	0.35
@ 1700°C	Wm ⁻¹ K ⁻¹	-	0.45
Thermal expansion (ambient to 1000°C)	K ⁻¹	7.8 x 10 ⁻⁶	8 x 10 ⁻⁶
Maximum continuous temperature	°C	1800	1800

Please note that these figures are based on test sample results and should be taken as a guide only