

Grade: **SUPERTON AI44-2**

Product group: FIRECLAY BRICKS OF INCREASED Al_2O_3 CONTENT

Application: Structural lining of heating units

Remarks -

Properties	Guaranteed	Typical	Unit	Standard
Chemical composition				EN ISO 12677
Al_2O_3	44	46	%	
Fe_2O_3	1,90	1,70	%	
Bulk density	2,20	2,25	g/cm^3	PN EN 993-1
Apparent porosity	20	18	%	PN EN 993-1
Cold crushing strength	40	45	N/mm^2	PN EN 993-5
Standard refractoriness	-	-	sP	PN EN 993-12
Refractoriness under the load $t_{0,5}$	-	1300	$^{\circ}\text{C}$	PN-EN ISO 1893
Refractoriness under the load $t_{0,6}$	-	1420	$^{\circ}\text{C}$	PN-69/H-04178
Thermal conductivity				PN EN 993-15
800 $^{\circ}\text{C}$	-	1,55	W/mK	
1100 $^{\circ}\text{C}$	-	1,65	W/mK	
1400 $^{\circ}\text{C}$	-	-	W/mK	
Linear thermal expansion				PN EN 993-19
800 $^{\circ}\text{C}$	-	0,40	%	
1100 $^{\circ}\text{C}$	-	0,60	%	
1400 $^{\circ}\text{C}$	-	0,80	%	
Permanent Linear Change				PN EN 993-10
1350 $^{\circ}\text{C}/2\text{h}$	-	+/- 0,2	%	
Thermal shock resistance at 950 $^{\circ}\text{C}$ (water changes)	-	25	n	DIN 51068-1

Typical values represent the average of results from the current production. Guaranteed values correspond to mean value due to p. 5.5 of ISO 5022 standard. All values are valid for mechanically-pressed, standard bricks of length ≤ 250 mm, width ≤ 124 mm and thickness 50-76 mm (NF1, NF2) and cannot be unconditionally transferred to other shapes (see corresponding sheet of Applicable Tolerances for Finished Products). Due to p.3.2.2 of ISO 5022 standard the properties which are the criteria of compliance assessment are limited to chemical composition and guaranteed physical properties. Properties may be subjected to fluctuations typical of the manufacturing process. PCO reserves the right to modify technical data sheet at any time without prior notice.