

KALOCER HD

High Alumina Ceramics

Material data sheet

General material description

KALOCER HD is an oxide ceramic material which is characterized by outstanding abrasion resistance and extraordinary micro-impact resistance. KALOCER HD is suitable for applications where very high temperature loads occur. KALOCER HD can be manufactured in very thin molded parts, which saves space and weight. Its smooth surface promotes the sliding properties. KALOCER HD is manufactured in the delivery forms of plates, shaped components and cylinders. The KALIMPACT KALOCER hard rubber composite is recommended for high macro impact resistance.

Product properties

Feature	Unit	Data
Chemical composition	Wt.-% Al ₂ O ₃	≥ 92
Hardness	Vickers	HV1
		1200
Density	g/cm ³	≥ 3,6
	lb/ft ³	≥ 225
Open porosity	%	< 1
Thermal coefficient of expansion	K ⁻¹ (20 - 1000 °C)	7,5x10 ⁻⁶
	°F ⁻¹ (68 - 1832 °F)	4.2x10 ⁻⁶
Thermal conductivity	W/mK (20 – 300 °C)	23
	Btu inch/ft ² h (68 – 572 °F)	160
Max. application temperature	°C	1200
	°F	2192
Max. thermal shock resistance	K/h	120
	°F/h	216
Wear resistance acc. ASTM C704-15	cm ³ with 90°	≤ 0.7

Approximate figures are given for all technical data. They are based on assessment of tests on specific samples and cannot be considered as a guarantee for which Kalenborn would have to assume legal responsibility. Subject to technical changes and errors.

