



MODERN CERAMICS

MANUFACTURING, INC.

Total Impurities Present in MCM 99.85% Alumina.

Impurities	Elements		Oxides	
	Avg. ppm	Fraction	Fraction	Avg. ppm
Na (Na ₂ O)	668	1.50097	2.72727	896
Mg (MgO)	62	0.08103	0.22271	103
Si (SiO ₂)	106	0.77420	3.54688	224
Fe (Fe ₂ O ₃)	92	1.11338	2.27586	135
Ca (CaO)	68	0.70326	1.37681	96
Ga (Ga ₂ O ₃)	7	0.61492	1.11111	9
Li (Li ₂ O)	4	0.38847	1.80000	9
Ti (Ti ₂ O ₃)	3	0.73937	1.66667	5
Mn (Mn ₂ O ₃)	3	0.96873	2.00000	4
Zr (Zr ₂ O ₃)	5	0.62680	1.00000	6
Ba (BaO)	4	0.66849	0.83333	5
K (K ₂ O)	2	0.52074	0.75000	3
Cr (Cr ₂ O ₃)	1	0.46812	1.00000	2
Cl	2	1.11111	1.11111	2
	Total impurities (ppm)			1499
	Total impurities (%)			0.1499
	Alumina Content (%)			99.8501

Note: Impurities Determined According to GDMS Report