

Magnesium Oxide Ceramic – MgO

Material Specifications Meeting the Requirements of ASTM: E1625-15

Material	Magnesia	
	S-464 MgO Type 2	S-461 MgO Type 1P
Chemical Analysis		
MgO, %	97.0 min	99.40 min
AL ₂ O ₃ , %	1.00 max	0.15 max
SiO ₂ , %	3.00 max	0.13 max
CaO, %	1.50 max	0.35 max
Fe ₂ O ₃ , %	0.15 max	0.04 max
B+Cd, %	0.0050 max	0.004 max
Mechanical Properties		
Porosity, %	MIN 12	MIN 14
Bulk Density, gm/cc	2.33	2.38
Flexural Strength, psi	2,000-10,000	2,000-10,000
Compressive Strength,	5,000-15,000	2,000-15,000

Compressive Strength,	5,000-15,000	2,000-15,000
psi		

Thermal Properties

Thermal Expansion	12.4	12.7
25°-700°		
inch/inch/°Cx10 ⁻⁶		

Note: This information is for design guidance only. Du-Co will not guarantee this information as absolute values. Various geometries can affect properties