



Magnesium Oxide – MgO

Our electrically Fused Magnesium Oxide extruded cores and dry pressed bushings and spacers have good electrical insulating properties with the added benefit, offering good thermal conducting properties at elevated temperatures. Typical applications include, but not limited to, cartridge heaters, thermocouples, mineral insulated cable, high watt density heaters as well as other temperature sensing devices.

Material Specifications		
Material	Magnesia	
	S-464	S-461
Chemical Analysis		
MgO, %	96.0 min	99.4 min
AL ₂ O ₃ , %	.40 max	.15 max
SiO ₂ , %	2.6 max	.15 max
CaO, %	1.5 max	.35 max
Fe ₂ O ₃ , %	.2 max	.15 max
B+Cd, ppm	400 max	30 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, psi	5,000-15,000	2,000-15,000
Thermal Properties		
Thermal Expansion 25°-700°	12.4	12.7