

# Air Fire Specialty Dielectrics

MRA offers a popular Class I N2200 (R3L) dielectric with enhanced dielectric constant for demanding applications where low loss and improved voltage response are required. MRA's air fire dielectrics are user and environmentally friendly, easy to process, and offer exceptional reliability for your demanding applications.

LF-451C	
Dielectric Type	N2200 (R3L)
<b>Dielectric Properties</b>	
Dielectric Constant	485 ±75
Dissipation Factor, % @1kHz, 1Vrms, 20µm AD thickness	≤ 0.05
Insulation Resistance, GΩ @25°C @125°C	>1,000 >100
Dielectric Breakdown Strength, Vdc/µm	≥ 40
<b>Powder Properties</b>	
Particle Size Distribution, µm D <sub>90</sub> D <sub>50</sub> D <sub>10</sub>	≤4.000 0.700 ±0.300 0.400 ±0.150
Surface Area, m <sup>2</sup> /g	3.05 ±0.95
Powder Density, g/cm <sup>3</sup>	≥5.40
L.O.I, % @650°C	≤ 0.50
Slurry Compatibility	Compatible with both solvent- and aqueous-base systems
Recommended Firing Conditions	1140°C ±10°C for 3 hours in air
Setters Recommendations	Open ZrO <sub>2</sub> setters
Electrode Metal Compatibility	Up to 70% Ag / 30%Pd
Electrode Paste	MRA EI-7030-X7R
RoHS Compatibility	RoHS Compliant

*The data presented is based on our research and is considered to be fair representation of this product. MRA makes no warranties, expressed or implied, as to its accuracy and assumes no liability out of its use by others.*