

OPTICAL CEMENT

EJ-500

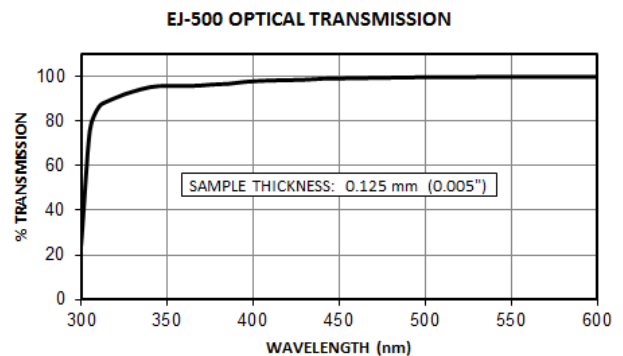
EJ-500 is a clear and colorless epoxy cement with refractive index at 1.57. It is ideal for optically bonding plastic scintillators and acrylic (PMMA) light guides. It is equally effective with PVT (polyvinyltoluene) or polystyrene based scintillators and may also be confidently used for making butt joints of optical fibers with polystyrene cores. This cement has a degree of flexibility making it useful for optically bonding glasses or the above plastics to glass windows. The optical transmission plot applies to a 0.125 mm (0.005") thick layer in comparison to air. It may also be used to cement metal or ceramic parts to plastic scintillators or PMMA light guides.

EJ-500 is fully cured at room temperature (20°C) with a working life of 60 minutes. The mixed cement takes 3-4 hours to set and 24 hours to harden, although it takes several days to achieve complete cure.



PACKAGE SIZES
300 g
600 g

PROPERTIES	EJ-500
Mixed Viscosity (cps)	800
Bond Strength (psi)	1800
Dielectric Strength (volts/mil)	420
Specific Gravity, Cured	1.17
Service Temperature (°C)	-65 to 105
Volume Resistivity, 25°C (ohm-cm)	10 ¹⁴
Coefficient of Thermal Expansion (per °C)	7.2 × 10 ⁻⁵
NASA Outgassing Properties	
Mass Loss (%)	1.69
Condensed Volatiles (%)	0.04



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