

**Product
Bulletin**

E20-205

Designed for applications requiring gap-filling properties, and adjustable flexibility.

GENERAL DESCRIPTION

E20-205LV – low viscosity, and E20-205MV – medium viscosity) are epoxide adhesives with adjustable flexibility for bonding applications requiring optimum bond strength. These unique adhesive resins have been formulated to yield excellent peel strength resistance, along with outstanding thermal shock, impact and vibration resistance.

To use E20-205, simply mix according to the mixing ration schedule desired and apply by any conventional methods of applications, i.e., brush, roller, spatula, doctor blade, etc.

E20-205LV is the lowest viscosity formulation designed for applications requiring an ultra think glue line with maximum penetration into substrate surface.

E20-205MV is a medium viscosity formulation, designed for applications requiring gap filling properties and a heavier glue line that that obtained by the low viscosity formulation.

*Properties listed in the specifications list are average; the actual values will depend on the formulation used.

APPLICATION

Surfaces must be clean and grease free. If desired, adhesion can be substantially increased by abrading the surface to be bonded with emery cloth, sand paper, carbide grinding tools, sandblasting, etc. A roughened porous surface will produce the best results. Any oxidized metal films should be removed just prior to application of the epoxide adhesive resin.

SPECIFICATIONS
HANDLING CHARACTERISTICS

Catalyst Number: Catalyst 205
Workable Pot Life, 100 g @ 25°C: 40 min.
Mixed Viscosity @ 25°C cps: 4,000
Recommended Cure: 8-12 hours @ room temp.
Color: clear light amber

PHYSICAL CHARACTERISTICS

Shrinkage Linear, in / in: 0.006
Hardness, Shore D: 40
Specific Gravity, 25°C / 25°C: 1.21
Tensile Strength, psi: 3.1 x 10⁵
Compressive Strength, psi: 12,000

THERMAL CHARACTERISTICS

Thermal Conductivity, btu / hr / ft² / °F / in: 2.9
Thermal Expansion Coefficient,
(cm / cm / °C · 10⁻³): 5.1
Heat Distortion, °C: 76
Operating Temperature Range, °C: -56.7 to +149

ELECTRICAL CHARACTERISTICS

Dielectric Strength, volts / mil: 410
Dielectric Constant, 60 Hz: 3.3-2.9
Dissipation Factor, 60 Hz: 0.05
Volume Resistivity, ohm · cm: 3x10¹³

APPLICATION (continued)

1. By weight, mix equal parts of E20-205MV catalyst with E20-205MV resin, or mix 2 parts of the E20-205LV resin to 1 part of the E20-205LV catalyst.
2. Allow to cure 8-12 hours at room temperature, or ½-1 hour at 150-160°F, or 15-30 min. at 200-220°F.
3. Increase the resin to catalyst ratio to get a more rigid mix.