

Low weight epoxy casting and potting resin. Low-density syntactic foam, high bond strength to most substrates. Good impact and thermal shock properties.

GENERAL DESCRIPTION

E40-405 has been engineered to dramatically reduce weight. For applications that require high performance toughness, impact resistance, excellent adhesion to metals, plastics and most other substrates, E40-405 is the resin system of choice.

E40-405 can be used for potting and encapsulation of electrical components, for molding and fabricating parts, for a lightweight adhesive, and many other uses.

E40-405 is an ideal choice for aeronautical, marine, and electronic applications. The cured resin is excellent for thermal cycling and low moisture absorption.

Sample kits are available on request.

SPECIFICATIONS

HANDLING CHARACTERISTICS

Catalyst Number: Catalyst 405
Mix Ratio, Catalyst to Resin, by Weight: 1:2
Workable Pot Life, 100 g @ 25°C: 40 min.
Mixed Viscosity @ 25°C cps: 15,000
Recommended Cure: overnight @ room temp.
Color: Natural

PHYSICAL CHARACTERISTICS

Shrinkage Linear, in / in: 0.3
Hardness, Shore D: 78
Specific Gravity, 25°C / 25°C: 0.87
Tensile Strength, psi: 4,000
Compressive Strength, psi: 15,000

THERMAL CHARACTERISTICS

Thermal Conductivity, btu / hr / ft² / °F / in: 1.3
Thermal Expansion Coefficient,
(cm / cm / °C · 10⁻⁵): 3.0
Heat Distortion, °C: 90
Operating Temperature Range, °C: -40 to +130

ELECTRICAL CHARACTERISTICS

Dielectric Strength, volts / mil: 380
Dielectric Constant, 60 Hz: 3.8
Volume Resistivity, ohm · cm: 10¹²

APPLICATION

1. By weight or volume, 1 part catalyst to 2 parts resin.
2. Cure at room temperature overnight or mild heat (150°F) for 1 hour.