



TRA - BOND

Z101 KIT

Gamma Vacuum

11-08-2010

Creating the purest vacuum environments on Earth

## Vac-Seal Epoxy

PHYSICAL ELECTRONICS

MODEL 288 - 6000

Vac-Seal is a medium viscosity epoxy formulation recommended for eliminating small vacuum leaks for its combination of superior structural, mechanical and electrical performance properties.

This two-part adhesive easily mixes and cures at room temperature, and develops strong, durable, tough bonds to most clean, dry material surfaces - including metals, ceramics, glass and many rigid plastics.

The fully cured VAC-Seal bonds are good electrical insulators which also provide excellent resistance to weather, galvanic action, many mild acids and alkalis, salt solution, petroleum solvents, lubricating oil, gasoline, jet fuels, alcohol, and many other organic and inorganic materials.

### Technical Specifications

| Property                                    | Typical Values *                     |
|---|--------------------------------------|
| Color                                       | Clear, slight haze                   |
| Specific Gravity                            | 1.200                                |
| Viscosity, cps, mixed (after mixing) @ 25°C | 19,000                               |
| Operating temperature range, °C             | -60 to 135                           |
| Hardness, Shore D                           | 85                                   |
| Mix ratio, parts by weight, Resin/Hardener  | 100/25                               |
| Lap shear, alum to alum, psi                | 3,300                                |
| Glass transition (Tg), °C, ultimate         | 62.00                                |
| Coefficient of expansion, cm/cm/°C          | 5.50E-05                             |
| Impact, izod, ft. lbs/inch of notch         | 0.80                                 |
| Dielectric strength, volts/mil              | 370                                  |
| Dielectric constant (1 KHz @ 25°C)          | 4.30                                 |
| Dissipation factor (1 KHz @ 25°C)           | 0.020                                |
| Volume resistivity, ohm-cm @ 25°C           | 6.00E+15                             |
| Volume resistivity, ohm-cm @ 100°C          | 5.00E+09                             |
| Reactive solids contents, %                 | 100                                  |
| Pot Life                                    | 30 minutes                           |
| Cure Schedule                               | 24 hours @ 25°C or<br>4 hours @ 65°C |

\*The properties given are TYPICAL VALUES and are not intended for use in preparing specifications