PROTAVIC ADHESIVE 302

ROOM TEMPERATURE (AIR DRY) FAST SETTING THIXOTROPIC TRANSPARENT EPOXY CEMENT AND BONDING AGENT

PROTAVIC ADHESIVE 302 is a high strength epoxy adhesive which was especially developed for applications requiring a fast setting and transparent epoxy cement. It has the consistency of petroleum jelly and, therefore, can be easily mixed and applied to small areas and assemblies without running or spreading.

PROTAVIC ADHESIVE 302 is transparent and colorless when fully hardened, making it exceptionally useful in bonding findings to transparent stones in the jewelry field, cementing metal to glass and plastics, and for transparent coatings in electronic component assemblies.

PROTAVIC ADHESIVE 302 exhibits the high shear strength, chemical resistance and electrical properties of the epoxy resin systems. In addition, a non-critical mixing ratio, by either weight or volume provides a degree of versatility in handling not generally available in adhesives and cements of this type.

DIRECTIONS FOR USE

1. Mix one portion of activator with either 4 (very fast setting) or 5 equal size portions (slower) of Base. Activator is designated as "Part A" while the base adhesive is designated "Part B". Measurement may be by either weight or volume.

2. If supplied in tubes, measure out 1/2 inch of Activator and mix with either 2 inches (very fast setting) or 2-1/2 inches of Base.

3. Mix the portions until the slightly yellow tint of the Activator disappears, and the mixture becomes clear.

4. Apply the mixed cement to one of the parts to be bonded. (Surfaces must be clean and grease-free.) Lacquer coatings on jewelry should be removed prior to bonding since the cement will adhere to the lacquer and will not provide a bond of maximum strength.

5. Allow to set for one to two hours at room temperature, or until parts are set and can be handled. Warming will decrease the time necessary for the bond to form. A heat lamp, oven, heat blower, etc. may be used.

Protavic America, Inc.

www.protavicamerica.com / 603.623.8626

NOTE: Since **Protavic 302** may be used as a casting, coating, or adhesive, the setting time in each application will vary in accordance with the amount used, the distribution of the mass (area), the room temperature, and the materials bonded, coated or encapsulated.

About 50 grams (3 ounces) should be the maximum mixed at one time to give a working life of approximately 15 to 20 minutes. If more than this amount is mixed, it should be spread out in a thin film on a flat metallic surface to absorb the heat of the reaction and prolong the working life.

TYPICAL PROPERTIES

	Part A- Activator	Part B - Base
Appearance	Straw color jelly	White jelly
Specific Gravity, #/gal	9	9
Viscosity	Thixotropic gel	Thixotropic gel

BOND STRENGTH

Standard test (aluminum to aluminum at 77°F - 3100 psi
at 350°F - 320 psi

Attainment of maximum bond strengths is dependent upon the cleanliness of the surface and the surface preparation. For general purpose bonding applications, grease-free clean surfaces produced by a solvent rinse are sufficient.

PHYSICAL PROPERTIES OF FULLY CURED PROTAVIC 302

Flexural Strength	12,000 psi
Tensile Strength	5200 psi
Heat Distortion Temperature	102°F
Rockwell Hardness	94 (M-Scale)
Izod Impact Resistance	0.19 ft-lbs per inch-notch

ELECTRICAL PROPERTIES OF FULLY CURED PROTAVIC 302

Arc Resistance	85 Seconds
Volume Resistivity	2.3×10^{10} ohm-cm
Dielectric Strength	560 volts/mil

	60 cps	10^3 cps	10^6
Power Factor	0.0106	0.026	0.042
Dielectric Constant	4.42	4.25	3.47
Loss Factor	0.465	0.112	0.144

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