Bomar™ BR-641D
Polybutadiene Urethane Acrylate

APPLICATIONS

- Coatings for Electronics
- Potting Compounds

FEATURES & BENEFITS

- Excellent Hydrophobic Properties
- Acid/Base Resistance
- Exception Elongation
- Outstanding Adhesion
- Low Water Absorption

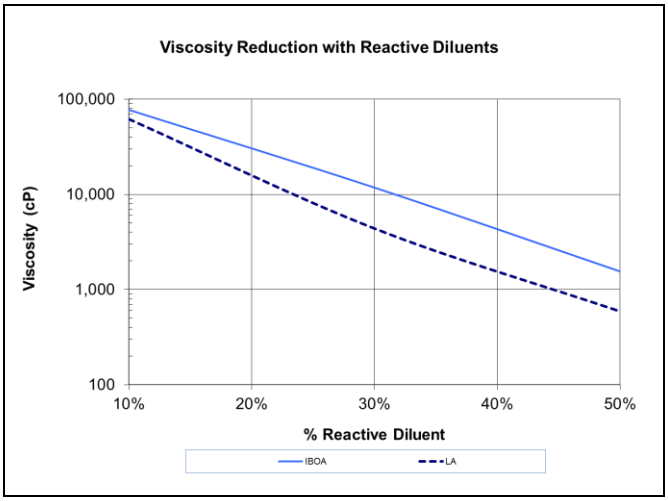
FEATURES & BENEFITS

- Low Temperature Flexibility
- Excellent Dielectric Properties
- Exhibits Hydrolytic Stability
- Gloss Finish

Bomar™ BR-641D is a Polybutadiene (PBD) urethane acrylate, which was designed to meet rigorous electronic coating applications. This oligomer has exceptional adhesion to various metals, glass, and polycarbonate substrates. BR-641D has many desirable properties that are typical to PBD resins, combined with radiation curability. In applications requiring thermal cycling resistance, BR-641D withstands the extremes of temperature typical of such tests, without undue degradation of properties. In addition to the adhesion properties listed in the table below, BR-641D showed excellent adhesion to PMMA, ABS, PVC, Nylon-6, Polystyrene, and Polypropylene.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	15,000
Pt-Co (APHA) Color or Gardner Color	<100
Refractive Index (25 °C)	1.48
Density, g/cm^3 (25°C)	0.93



Brookfield – CAP 2000+ @ 25°C

TYPICAL FORMULATIONS

	I30	I50
BR-641D	70	50
IBOA	30	50
TMPTA		
TPGDA		
HDDA		
Omnirad™ 481	2	2
Viscosity, 25°C *	11,781	1,550

* Brookfield – CAP 2000+ @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50
Tensile Strength, psi**	700	1050
Elongation, %**	320	375
Elastic Modulus, ksi**	0.2	0.3
Durometer Hardness	85A	54D
Water Absorption (%)	0.06	0.06
MEK Double Rubs (#)	60	40
T_g (DMA) = -20°C; Peak tan delta; cured with 2 phr of Omnirad™ 481		

** Per ASTM D882

ADHESION PROPERTIES

Substrate	I30	I50
Aluminum	✓✓✓	✓✓✓
Cold Rolled Steel	✓✓✓	✓✓✓
Glass	✓✓✓	✓✓✓
HDPE		
Polycarbonate	✓✓✓	✓✓✓
Stainless Steel	✓✓✓	✓✓✓

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

05/06/2014

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