

Bomar[®] BR-641E Polybutadiene Urethane Acrylate

APPLICATIONS

- Flexible Inks
- Pressure-Sensitive Adhesives
- Electronic Coatings

FEATURES

- Excellent Flexibility
- Extremely Low Water Absorption
- High Temperature Resistance
- High Chemical Resistance

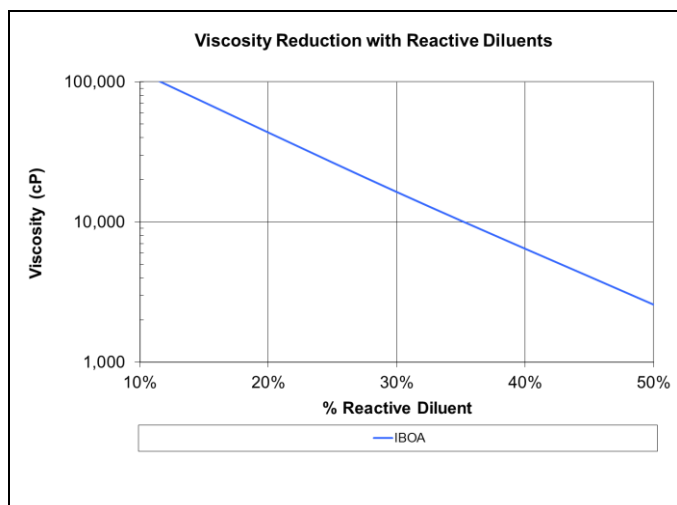
FEATURES

- Excellent Moisture Resistance
- Excellent Heat Resistance
- Excellent Light Stability

Bomar[®] BR-641E is a polybutadiene urethane acrylate oligomer designed for rigorous electronic coating, flexible ink, and pressure-sensitive adhesive applications. This oligomer is also perfect for extremely low water absorption applications. It is resistant to thermal cycling and can withstand the temperature extremes typical of such tests without undue degradation of properties.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	25,000
Pt-Co (APHA) Color	18 APHA
Refractive Index (25°C)	1.477
Density, g/cm ³ (25°C)	0.882



Brookfield – CAP 2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50
BR-641E	70	50
IBOA	30	50
HDDA		
TPGDA		
TMPTA		
Irgacure [®] 184	2	2
Viscosity, 25°C*	16,375	2,575

* Brookfield – CAP2000 + @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50
Tensile Strength, psi**	51.6	349.2
Elongation, %**	85.99	366.16
Elastic Modulus, ksi**	0.074	0.226
Durometer Hardness	42.2A	59.8A
MEK Double Rubs (#)	32	12
Water Absorption (%)	0.016	0.03
T _g (DMA) = -28°C; Peak tan delta; cured with 2 phr of Irgacure [®] 184		

** Per ASTM D882

ADHESION PROPERTIES

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

✓ Recommended
✓✓ Highly Recommended
✓✓✓ Strongly Recommended

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04/13/2016

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