

BOMAR™ BR-970BT Difunctional Aliphatic Urethane Acrylate Oligomer

APPLICATIONS

- Inkjet Printing
- Graphic Arts
- Electronics

FEATURES & BENEFITS

- Low Viscosity
- Hydrolytic Stability
- Abrasion & Chemical Resistance

FEATURES & BENEFITS

- Gloss Finish
- Non-Yellowing
- Stain Resistance
- Low Skin Sensitivity

BOMAR™ BR-970BT is a low molecular weight, difunctional, aliphatic urethane acrylate. BR-970BT can be blended with other oligomers to achieve a balance of toughness and flexibility. BR-970BT offers rapid cure and low yellowing properties where premium performance is required. This material has low skin sensitivity for dental and cosmetic applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	13,000
Pt-Co (APHA) Color	17
Refractive Index (25°C)	1.489
Density, g/cm ³ (25°C)	1.11

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-970	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	950	230	1,050	270	120

* Brookfield – CAP2000+ @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	3,400	6,607	7,234	4,162	4,753
Elongation, %**	50	4	4	6	3
Elastic Modulus, ksi**	40	279	303	162	314
Durometer Hardness	77D	83D	88D	79D	76D
MEK Double Rubs (#)	>200	100	>200	65	145

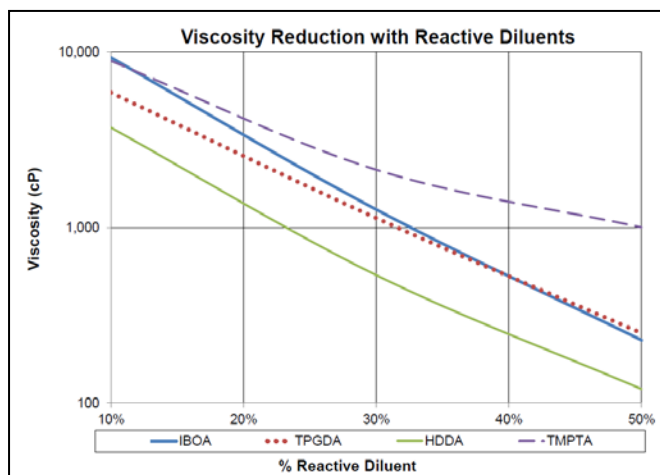
T_g (DMA) = 40°C; Peak tan delta; cured with 2 phr of Omnirad™ 481

** Per ASTM D882

ADHESION PROPERTIES

Substrate	I30	I50	TM50	TP50	H50
Aluminum	✓✓✓	✓✓		✓	
Cold Rolled Steel	✓✓✓	✓✓✓		✓✓✓	✓✓
Glass	✓✓✓	✓✓✓			
ABS	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Acrylic	✓	✓✓✓	✓✓✓	✓✓	✓✓
HDPE					
Polycarbonate	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
Stainless Steel	✓✓	✓✓✓		✓✓	✓

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended



Brookfield – CAP2000+ @ 25°C

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