

## BOMAR® BR-144B Trifunctional Aliphatic Urethane Acrylate Oligomer

**APPLICATIONS**

- Wood Floor Coatings
- Furniture Coatings
- Graphic Arts

**FEATURES & BENEFITS**

- Rapid Cure Speed
- Exhibits Hydrolytic Stability
- Low Color/Non-Yellowing
- Provides Solvent Resistance
- Low Skin Irritation

**FEATURES & BENEFITS**

- High Gloss
- Enhances Weatherability
- Improves Abrasion Resistance
- Low MEHQ Levels
- Low Skin Sensitivity

BOMAR® BR-144B, a medium molecular weight, trifunctional, aliphatic polyether urethane acrylate oligomer, offers the formulator a cost effective means of obtaining high abrasion resistance and solvent resistance in a durable, high-gloss coating. While not limited to these fields, BR-144B is an effective choice in wood and furniture applications, along with abrasion-resistant overprint varnishes. This material has low skin sensitivity for dental and cosmetic applications.

**UNCURED PROPERTIES**

Property	Value
Viscosity, cP (60°C)	20,000
PT-Co (APHA) Color	15
Refractive Index (25°C)	1.487
Density, g/cm <sup>3</sup> (25°C)	1.10

**TYPICAL FORMULATIONS**

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-144B	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	20,000	985	6,010	1,050	390

\* Brookfield – CAP 2000+ @ 25°C

**CURED MECHANICAL PROPERTIES**

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	5,600	5,700	3,800	3,700	3,900
Elongation, %**	6	4.36	2.88	10.56	3.95
Elastic Modulus, ksi**	250	127	139	97	147
Durometer Hardness	85D	84D	71D	82D	75D
Pencil Hardness <sup>‡</sup>	2B	2B	F	2B	2B
MEK Double Rubs (#)	65	16	>200	>200	183

T<sub>g</sub> (DMA) = 56°C; Peak tan delta; cured with 2 phr of Omnirad™ 481

\*\* Per ASTM D882

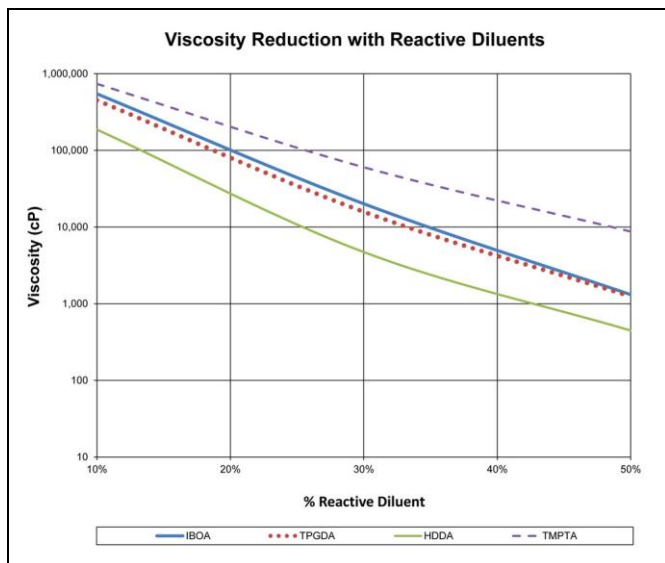
<sup>‡</sup> Per ASTM D3363

**ADHESION PROPERTIES**

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

The use of these monomers with BR-144B is ideal for harder coatings.

✓ Recommended    ✓✓ Highly Recommended    ✓✓✓ Strongly Recommended



Brookfield – CAP2000+ @ 25°C

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