

## Bomar™ BR-116

### Trifunctional Aromatic Polyether Urethane Methacrylate Oligomer

**APPLICATIONS**

- Steel-Bonding Coatings
- Glass-Bonding Coatings
- Soft Touch Coatings
- Adhesion Promoter for Coatings

**FEATURES & BENEFITS**

- Improves Adhesion
- Enhances Flexibility
- Low Color
- Provides Softness

**FEATURES & BENEFITS**

- Exhibits Hydrolytic Stability
- Gloss Finish
- Low Shrinkage
- Oil & Chemical Resistant

Bomar™ BR-116 oligomer, a trifunctional, aromatic polyether urethane methacrylate, is used in the manufacture of soft coatings and adhesives which are made to adhere to metals and glass. BR-116 offers superior bond strength and excellent reduction capabilities in common monomers.

**UNCURED PROPERTIES**

Property	Value
Viscosity, cP (25°C)	80,000
Pt-Co (APHA) Color	10
Refractive Index (25°C)	1.481
Density, g/cm <sup>3</sup> (25°C)	1.09

**TYPICAL FORMULATIONS**

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-116	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	5,240	1,125	2,975	900	425

\* Brookfield – Small Samples Adapter @ 25°C

**CURED MECHANICAL PROPERTIES**

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	400	1,814	2,423	1,064	1,472
Elongation, % <sup>^</sup>	57	140	3.5	9	7
Elastic Modulus, ksi <sup>^</sup>	1	7	148.5	31	25.7
Durometer Hardness	38D	47D	76D	65D	73D
Pencil Hardness <sup>¥</sup>	3H	2H	F	HB	HB
MEK Double Rubs (#)	8	5	>200	14	110
T <sub>g</sub> (DMA) = -18°C; Peak tan delta; cured with 2 phr of Omnirad™ 481					

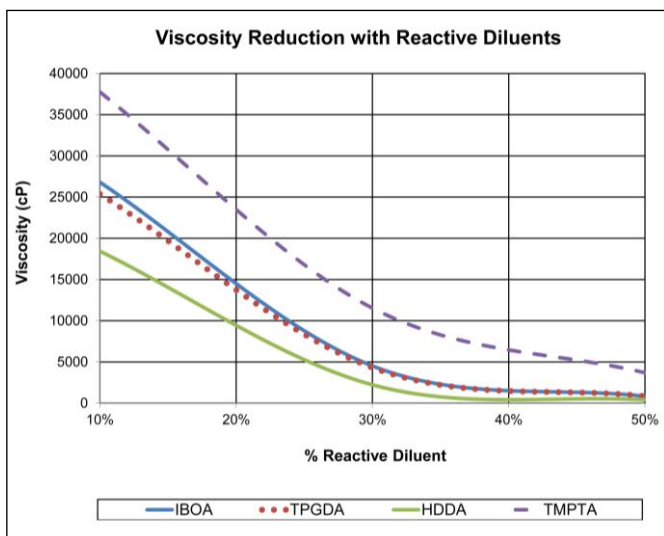
\*\* Per ASTM D882

¥ Per ASTM D3363

**ADHESION PROPERTIES**

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

✓ Recommended    ✓✓ Highly Recommended    ✓✓✓ Strongly Recommended



Brookfield – CAP2000+ @ 25°C

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