

Bomar™ BR-582I10 Aliphatic Polyether Urethane Acrylate Oligomer

APPLICATIONS

- Coatings for Plastic
- Coatings for Metal

FEATURES & BENEFITS

- Develops Impact Resistance
- Enhances Flexibility
- Exhibits Hydrolytic Stability
- Provides Weatherability

FEATURES & BENEFITS

- Imparts Toughness
- Great Tensile Strength
- Gloss Finish

Bomar™ BR-582I10 is an aliphatic polyether urethane acrylate which provides a balance of toughness and flexibility. This oligomer is highly recommended for use in single-coat, flexible coatings on metal and plastic substrates. It is an excellent choice for impact and bend resistant coatings. BR-582I10 also brings desirable weather resistance and low-yellowing properties to formulations utilizing it.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50 °C)	80,000
Pt-Co (APHA) Color	<50
Refractive Index (25 °C)	1.478
Density, g/cm ³ (25 °C)	1.14

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-582I10	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity*	43000	5100	18500	4700	2100

* Brookfield – CAP2000+ at 25 °C

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	3400	3200	4200	2700	2700
Elongation, %**	180	140	6	25	10
Elastic Modulus, ksi**	1.9	15	100	21	45
Durometer Hardness	53D	72D	81D	68D	69D
MEK Double Rubs (#)	>200	160	>200	90	80
T _g (DMA) ^Y = TBD					

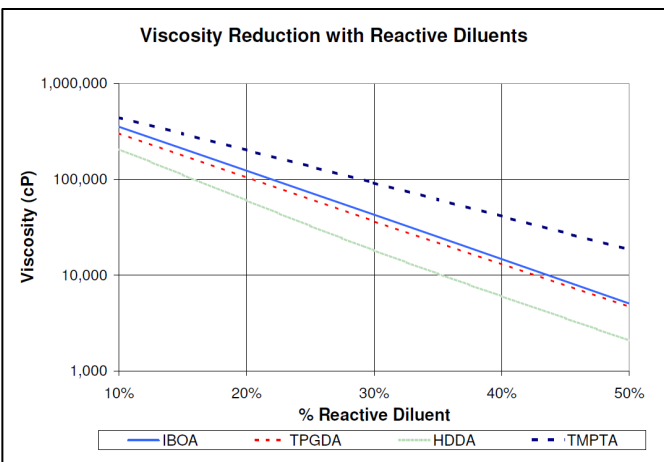
** Per ASTM D882

^Y Per ASTM D3363

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended



Brookfield – CAP2000+ @ 25 °C

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