

Bomar[®] BR-582E8

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-582E8 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-582E8 also brings desirable weather resistance and low-yellowing properties to formulations utilizing it.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	60,000
Pt-Co (APHA) Color	<50
Refractive Index (25°C)	1.476
Density, g/cm ³ (25°C)	1.14

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-582E8	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad [™] 481	2	2	2	2	2
Viscosity*	25000	3400	12500	2900	1500

* Brookfield – CAP2000+ at 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	2600	3400	3600	2500	2800
Elongation, %**	180	200	5	23	12
Elastic Modulus, ksi**	1.3	4.6	93	24	40
Durometer Hardness	85A	56D	78D	64D	65D
MEK Double Rubs (#)	40	60	200	30	30

T_g (DMA) = 23°C; Peak tan delta; cured with 2 phr of Omnirad[™] 481

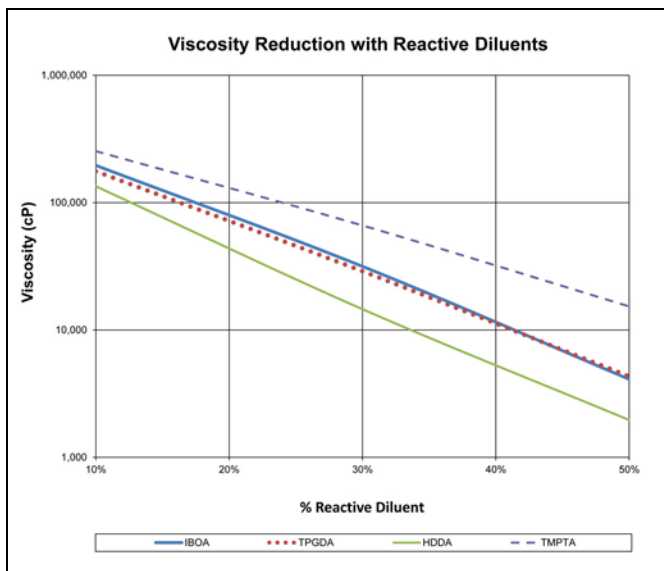
** Per ASTM D882

‡ Per ASTM D3363

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended



Brookfield – CAP2000+ @ 25°C

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