

Bomar[®] BR-582H15

2.4 Functional Aliphatic Polyether Urethane Acrylate

APPLICATIONS

- Coatings for Plastics
- Coatings for metal

FEATURES

- Develops impact resistance
- Enhances flexibility
- Exhibits hydrolytic stability
- Provides weatherability

FEATURES

- Imparts toughness
- Excellent tensile strength
- Oil and Chemical resistant
- Non-yellowing

BR-582H15 is an aliphatic polyether urethane acrylate which imparts toughness and impact resistance. This oligomer is highly recommended for use in plastic and metal coatings. It is an excellent choice for applications that require oil and chemical resistance. BR-582H15 also has high Durometer hardness, which makes tough, hard coatings for outdoor applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	14,000
Pt-Co (APHA) Color	20
Refractive Index (25°C)	1.490
Density, g/cm ³ (25°C)	1.04

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	2,800	3,300	4,700	3,000	2,700	
Elongation, %**	65	60	5	15	5	
Elastic Modulus, ksi**	7	60	100	50	70	
Durometer Hardness	60D	70D	80D	66D	70D	
Water Absorption, % (24 hrs)	0.50	0.30	0.70	0.70	0.60	
MEK Double Rubs (#)	125	75	170	170	140	
T _g (DMA) = 18°C; Peak tan delta; cured with 2 phr of Omnirad [®] 184						

** Per ASTM D882

ADHESION PROPERTIES

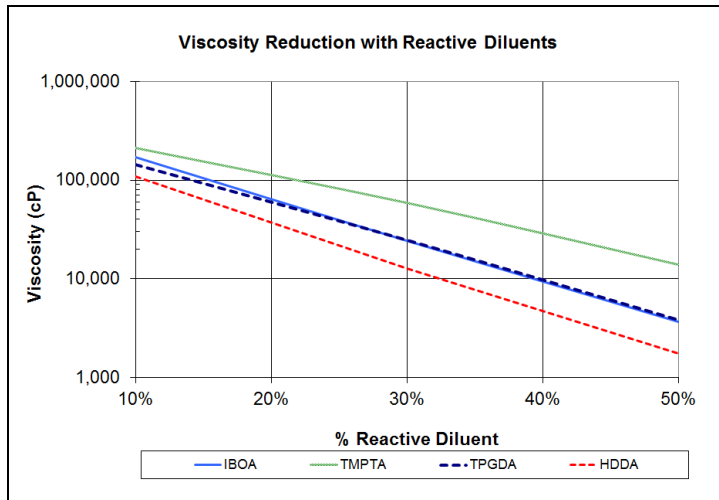
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS	✓✓✓	✓✓✓	✓✓	✓	✓✓✓	
Aluminum	✓✓✓	✓✓✓				
Cold Rolled Steel	✓✓✓	✓✓✓				
Glass	✓✓✓	✓✓✓				
HDPE						
PET						
PMMA						
Polycarbonate	✓✓✓	✓✓✓		✓✓✓	✓✓✓	
Polypropylene						
PVC						
Stainless Steel	✓✓✓	✓✓✓				

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-582H15	70	50	50	50	50	70
IBOA	30	50				
TMPTA			50			
TPGDA				50		
HDDA					50	
HEMA						30
Omnirad [™] 184	2	2	2	2	2	2
Viscosity, 25°C *	24,000	3,700	3,800	3,800	1,800	

* Brookfield – CAP 2000+ @ 25°C.



Brookfield – CAP 2000+ @ 25°C

GENERAL INFORMATION

This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from skin with soap and water. Never use organic solvents to remove material from skin and eyes. For more information on the safe handling of this material, please refer to the I Safety Data Sheet before use.

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