

## Bomar™ BR-741 Difunctional Aliphatic Urethane Acrylate

### APPLICATIONS

- Coatings for Metal
- Coatings for Plastic

### FEATURES & BENEFITS

- Improves Adhesion
- Enhances Hardness
- Non-Yellowing

### FEATURES & BENEFITS

- Develops Weatherability
- Provides Abrasion Resistance
- Gloss Finish

Bomar™ BR-741 is a low molecular weight, difunctional, aliphatic polyester urethane acrylate that can be effectively formulated for adhesion to steel, aluminum, and various plastics with some amount of surface energy. The resulting hard, tough film makes an effective protective coating, which will be non-yellowing, due to the aliphatic backbone of BR-741.

### UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	150,000
Pt-Co (APHA) Color	40
Refractive Index (25°C)	1.494
Density, g/cm <sup>3</sup> (25°C)	1.10

### TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-741	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	34,000	1,875	8,650	1,100	750

\* Brookfield – Small Samples Adapter

### CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	9,165	7,393	3,813	5,358	4,510
Elongation, %**	10	3	1.2	3	1.8
Elastic Modulus, ksi**	391	336	417	372	328
Durometer Hardness	59D	83D	>95D	81D	83D
MEK Double Rubs (#)	35	13	>200	175	>200

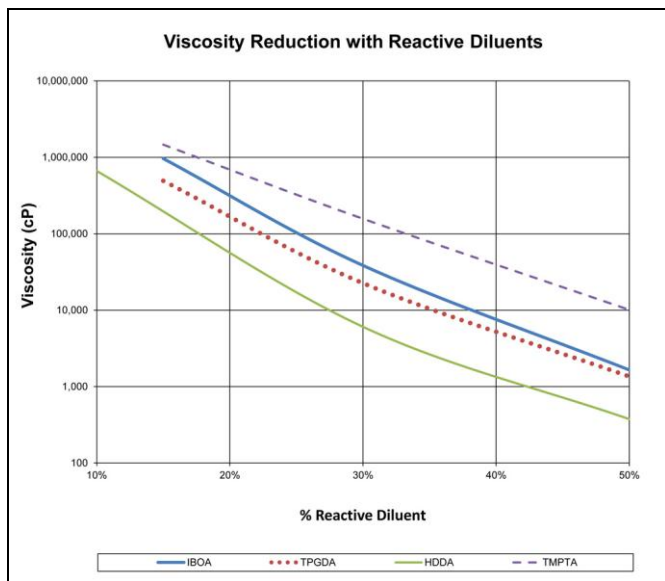
T<sub>g</sub> (DMA) = 79°C; Peak tan delta; cured with 2 phr of Omnirad™ 481

\*\* Per ASTM D882

### 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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