

## Bomar<sup>®</sup> BR-3641AJ

### 1.3 Functional Aliphatic Polyether Urethane Acrylate

**APPLICATIONS**

- Pressure sensitive adhesives (PSA)
- Adhesion promoter
- Reactive tackifier

**FEATURES**

- Optical clarity
- Exhibits hydrolytic stability
- Resilience

**FEATURES**

- Tenacious adhesion
- Enhances weatherability
- Non-yellowing

BR-3641AJ is an aliphatic polyether urethane acrylate with a high molecular weight and theoretical 1.3 functionality. Films formulated with BR-3641AJ are highly flexible, elastomeric, and tacky. It is excellent as an adhesion promoter or reactive tackifier. It is a perfect choice for optically clear UV-PSAs.

**UNCURED PROPERTIES**

Property	Value
Viscosity, cP (60°C)	10,000
Pt-Co (APHA) Color	15
Refractive Index (25°C)	1.460
Density, g/cm <sup>3</sup> (25°C)	1.01

**CURED MECHANICAL PROPERTIES**

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	50	600	1,000	600	700	-
Elongation, %**	400	500	2.2	13.7	5.9	-
Elastic Modulus, ksi**	0.03	5.2	50	15	20	-
Durometer Hardness	17A	62A	56D	27D	41D	13A
Water Absorption, % (24 hrs)	1.25	0.81	1.70	1.49	1.28	7.45
MEK Double Rubs (#)	9	8	5	2	15	20
T <sub>g</sub> (DMA) = -36°C; Peak tan delta; cured with 2 phr of Omnirad <sup>®</sup> 184						

\*\* Per ASTM D882

**ADHESION PROPERTIES**

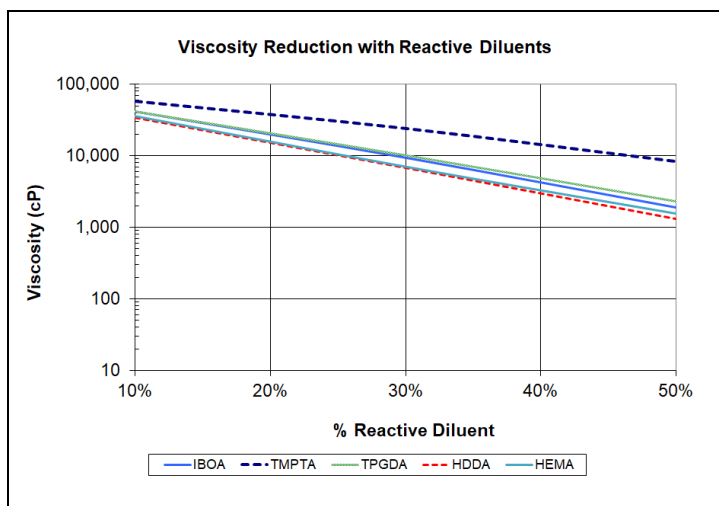
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS						
Aluminum		✓				
Cold Rolled Steel		✓				
Glass		✓				
HDPE						
PET		✓				
PMMA			✓			
Polycarbonate						
Polypropylene						
PVC		✓				
Stainless Steel		✓				

✓ Recommended    ✓✓ Highly Recommended    ✓✓✓ Strongly Recommended

**TYPICAL FORMULATIONS**

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-3641AJ	70	50	50	50	50	70
IBOA	30	50				
TMPTA			50			
TPGDA				50		
HDDA					50	
HEMA						30
Omnirad <sup>™</sup> 184	2	2	2	2	2	2
Viscosity, 25°C *	9,500	1,900	8,400	2,300	1,300	7,000

\* 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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