

Bomar[®] BR-3641AA

1.3 Functional Aliphatic Polyether Urethane Acrylate

APPLICATIONS

- Pressure sensitive adhesives
- Adhesion promoter
- Reactive tackifier

FEATURES

- Low color
- Exhibits hydrolytic stability
- Good weatherability

FEATURES

- Tenacious adhesion
- High elongation and resilience
- Non-yellowing

BR-3641AA is an aliphatic polyether urethane acrylate with a high molecular weight and theoretical 1.3 functionality. Films formulated with BR-3641AA are highly flexible, elastomeric, and tacky. When formulated as an adhesive, this oligomer is excellent as an adhesion promoter or reactive tackifier. This oligomer offers improved adhesion to a variety of substrates.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	7,000
Pt-Co (APHA) Color	8.6
Refractive Index (25°C)	1.460
Density, g/cm ³ (25°C)	1.000

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	20	440	900	700	700	Will Not Cure to Test
Elongation, %**	170	1,000	2.7	15.0	8.2	
Elastic Modulus, ksi**	Modulus Too Low to Accurately Report					
Durometer Hardness	09A	24D	59D	35D	40D	
Water Absorption, % (24 hrs)	1.23	0.75	1.75	1.60	1.31	
MEK Double Rubs (#)	19	9	131	8	8	
T _g (DMA) = -49°C; Peak tan delta; cured with 2 phr of Irgacure [®] 184						

** Per ASTM D882

ADHESION PROPERTIES

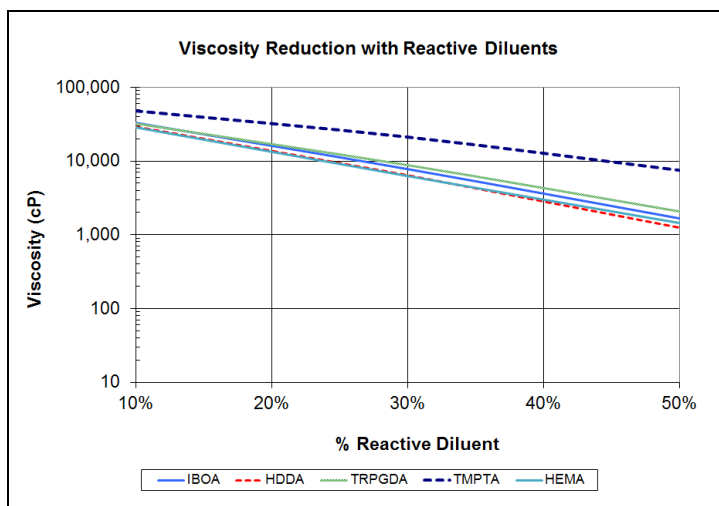
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS	✓	✓✓		✓	✓	
Aluminum	✓	✓✓				
Cold Rolled Steel	✓✓	✓✓				
Glass		✓✓				
HDPE	✓	✓✓				
PET	✓	✓✓			✓	
PMMA	✓	✓✓		✓	✓	
Polycarbonate	✓	✓		✓	✓	
Polypropylene	✓	✓✓			✓	
PVC	✓	✓✓✓		✓	✓	
Stainless Steel	✓	✓✓		✓		

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-3641AA	70	50	50	50	50	70
IBOA	30	50				
TMPTA			50			
TPGDA				50		
HDDA					50	
HEMA						30
Irgacure [®] 184	2	2	2	2	2	2
Viscosity, 25°C *	7,600	1,700	7,500	2,000	1,300	6,300

* Brookfield – CAP 2000+ @ 25°C.



Brookfield – CAP 2000+ @ 25°C

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