

Bomar™ BRC-841 Hydrophobic Urethane Acrylate

APPLICATIONS

- Coatings for Steel
- Coatings for Plastic

FEATURES & BENEFITS

- Improves Adhesion
- Enhances Hardness
- Non-Yellowing
- Low Water Absorption

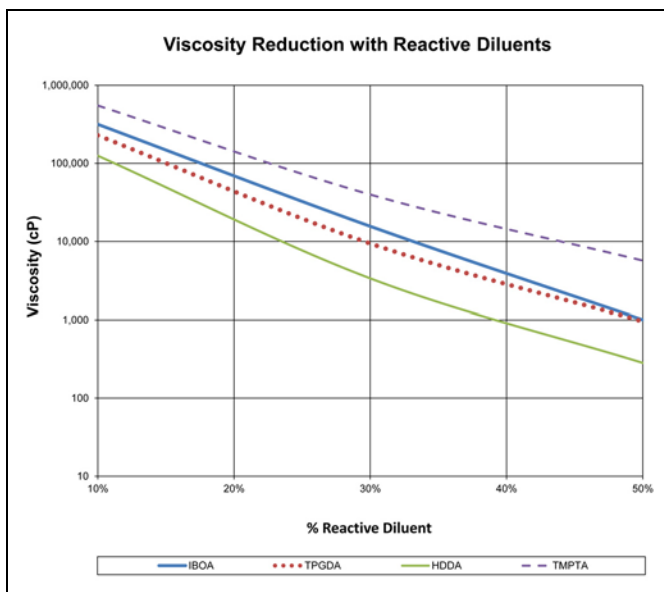
FEATURES & BENEFITS

- Increases Weatherability
- Provides Abrasion Resistance
- Gloss Finish
- Excellent Chemical Resistance

Bomar™ BRC-841 is a low-molecular-weight, difunctional, hydrophobic urethane acrylate that can be effectively formulated for steel and various plastic hard coatings. The resulting hard, tough film makes an effective non-yellowing protective single-coating. The low water absorption and alkaline resistance make BRC-841 ideal for the following industries: aerospace, automotive, appliances, cosmetic, electronic, industrial, medical devices, metal finishing, and UV-curable inks and coatings.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	40,000
Pt-Co (APHA) Color	<50
Refractive Index (25°C)	1.495
Density, g/cm ³ (25°C)	1.10



Brookfield – CAP2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BRC-841	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	27,000	2,200	1,600	1,700	700

* Brookfield – Small Samples Adapter

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	8,000	9,400	8,000	8,900	7,800
Elongation, %**	8	6	4	5	6
Elastic Modulus, ksi**	210	250	240	260	190
Durometer Hardness	85D	87D	88D	86D	85D
MEK Double Rubs (#)	130	100	>200	190	>200
Water Absorption (%)	0.27	0.22			
T _g (DMA) = 84°C; Peak tan delta; cured with 2 phr of Omnirad™ 481					

** Per ASTM D882

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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Technical Data Collection Prior to 2012

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