

Bomar® BR-571 Difunctional Aliphatic Polyether Urethane Acrylate

APPLICATIONS

- Coatings for wood
- Pigmented coatings
- Rigid plastic topcoats

FEATURES

- Improves solvent resistance
- Enhances toughness
- Improves weatherability
- Gloss finish

FEATURES

- Provides hardness
- Exceptionally low color
- Exhibits hydrolytic stability

BR-571 is an aliphatic polyether urethane diacrylate with exceptionally low color. Based on a stable polyether backbone, BR-571 offers excellent physical properties in formulated films. While relatively high in neat viscosity, BR-571 reduces quickly with the addition of heat or monomer. Formulations using BR-571 often have a unique blend of toughness and flexibility.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	31,000
Pt-Co (APHA) Color	20
Refractive Index (25°C)	1.494
Density, g/cm ³ (25°C)	1.08

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	3,400	2,800	4,600	2,400	2,800	2,300
Elongation, %**	75	40	3.1	10.6	5.5	80
Elastic Modulus, ksi**	45	140	170	70	90	20
Durometer Hardness	64D	75D	80D	68D	71D	60D
Water Absorption, % (24 hrs)	0.50	0.35	0.70	0.80	0.66	2.74
MEK Double Rubs (#)	75	25	>200	92	130	23
T _g (DMA) = 63°C; Peak tan delta; cured with 2 phr of Omnirad® 184						

** Per ASTM D882

ADHESION PROPERTIES

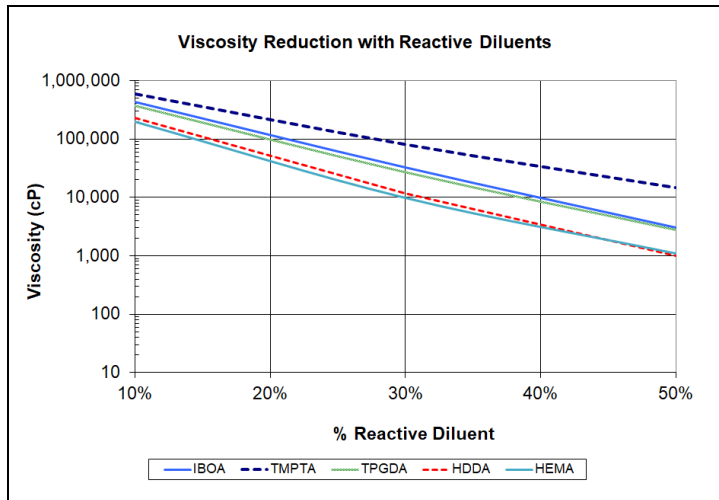
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS		✓	✓✓✓	✓✓	✓✓	
Aluminum		✓				
Cold Rolled Steel						
Glass		✓				✓
HDPE						
PET		✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
PMMA			✓✓✓		✓✓	
Polycarbonate	✓	✓✓	✓✓✓	✓✓	✓✓✓	
Polypropylene						
PVC	✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	✓
Stainless Steel						✓

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-571	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 *	34,000	3,000	15,000	2,800	1,000	9,800

* 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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