

Bomar™ BR-941 Hexafunctional Aliphatic Urethane Acrylate

APPLICATIONS

- Coatings for Wood
- Plastic Hard Coatings
- Floor Coatings

FEATURES & BENEFITS

- Fast Cure Response
- Oil & Chemical Resistant
- Imparts Scratch Resistance
- Exhibits Hydrolytic Stability
- Improves Weatherability

FEATURES & BENEFITS

- Provides Hardness
- Non-Yellowing
- Improves Abrasion Resistance
- Gloss Finish

Bomar™ BR-941, a hexafunctional, aliphatic polyether urethane acrylate, is used in applications that require a hard, chemically resistant, non-yellowing coating or adhesive with very fast cure response. BR-941's high functionality and low molecular weight deliver its excellent properties to systems with a final viscosity much lower than is typical of urethane acrylates. BR-941 is compatible with a broad range of monomers and oligomers.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	25,000
Pt-Co (APHA) Color	30
Refractive Index (25°C)	1.496
Density, g/cm ³ (25°C)	1.20

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-941	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	4,400	400	2,580	405	120

* Brookfield – Small Samples Adapter

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	3,340	2,507	931	2,132	1,704
Elongation, %**	7	5	1	1.5	1.5
Elastic Modulus, ksi**	265	93	191	228	183
Durometer Hardness	92D	90D	92D	91D	90D
Pencil Hardness [‡]	2H	B	2H	HB	2H
MEK Double Rubs (#)	>200	>200	>200	>200	>200

T_g (DMA) = 82°β, >200°C; Peak tan delta; cured with 2 phr of Omnirad™ 481.
First value is a secondary transition.

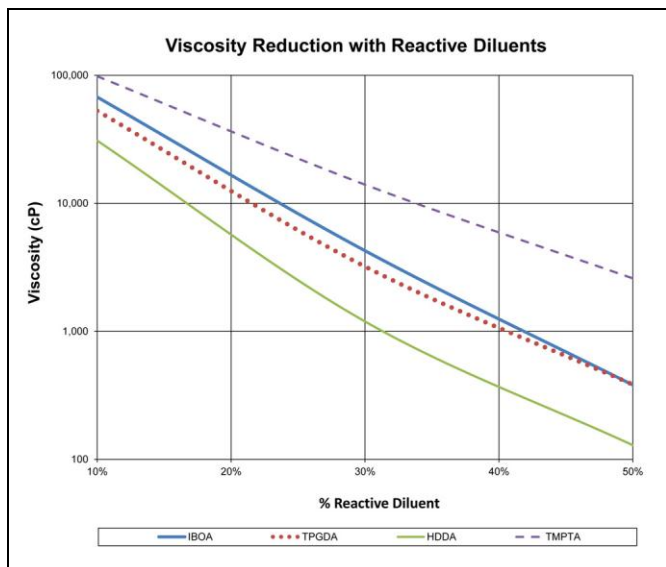
** Per ASTM D882

[‡] Per ASTM D3363

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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