

Bomar[®] BR-204 Difunctional Aromatic Polyether Urethane Methacrylate

APPLICATIONS

- Primer coatings
- Glass coatings
- Adhesives

FEATURES

- High bond strength
- Low neat viscosity
- Low color

FEATURES

- High elongation
- Exhibits hydrolytic stability

BR-204 is an aromatic polyether urethane dimethacrylate that finds use in a diverse number of UV adhesives applications. BR-204 is valued for its strong bond strength, its affinity for glass, steel, and a variety of plastic substrates, and for its excellent elongation. BR-204 is also of value for its low initial viscosity and low color, despite its aromatic nature.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	11,000
Pt-Co (APHA) Color	15
Refractive Index (25°C)	1.502
Density, g/cm ³ (25°C)	1.030

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	90	150	1,700	1,000	1,400	120
Elongation, %**	120	190	3.0	15.0	7.9	200
Elastic Modulus, ksi**	0.13	0.22	65	20	30	0.32
Durometer Hardness	39A	51A	75D	45D	55D	30A
Water Absorption, % (24 hrs)	1.56	1.03	1.64	1.46	0.89	6.78
MEK Double Rubs (#)	3	6	128	8	17	32

T_g (DMA) = -47°C; Peak tan delta; cured with 2 phr of Irgacure[®] 184

** Per ASTM D882

ADHESION PROPERTIES

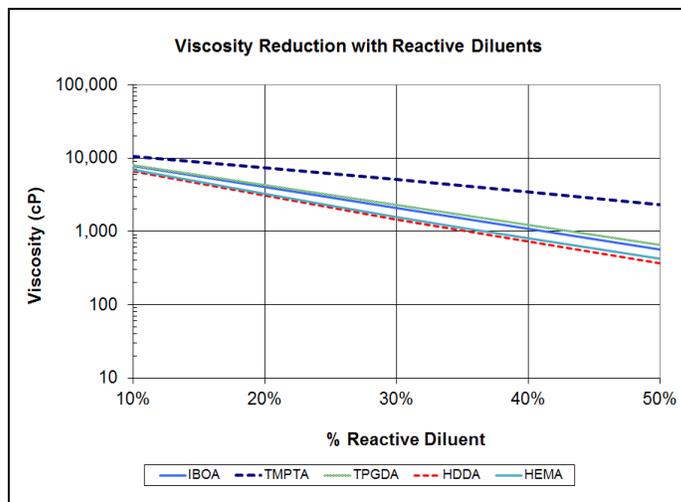
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS	✓	✓	✓✓✓	✓	✓✓	✓
Aluminum		✓				✓
Cold Rolled Steel		✓		✓	✓✓	✓
Glass		✓				✓
HDPE		✓				
PET		✓	✓	✓✓	✓✓	✓
PMMA	✓✓	✓	✓✓✓	✓	✓✓✓	
Polycarbonate	✓	✓	✓✓	✓✓	✓✓✓	
Polypropylene		✓	✓			
PVC					✓	
Stainless Steel		✓		✓	✓✓	

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-204	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 *	2,100	600	2,300	700	400	1,600

* Brookfield – CAP 2000+ @ 25°C.



Brookfield – CAP 2000+ @ 25°C

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