

Bomar[®] BR-3042 Difunctional Aromatic Polyether Urethane Acrylate

APPLICATIONS

- UV pressure sensitive adhesives
- Laminating adhesives
- Plastic adhesives

FEATURES

- Enhances adhesion to plastic substrates
- Increases flexibility

FEATURES

- Improves solvent resistance

BR-3042 is an aromatic polyether urethane diacrylate designed for UV adhesive applications. Cured films of BR-3042 and monofunctional monomers result in soft, highly elongative, tacky systems ideal for use in UV pressure sensitive adhesives (PSA), or UV-curable laminating adhesives. BR-3042 enhances adhesion and improves solvent resistance.

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	60	800	1,500	1,000	1,100	Poor Cure
Elongation, %**	150	500	3.5	17.0	8.0	
Elastic Modulus, ksi**		3.1	55	20	25	
Durometer Hardness	23A	61A	66D	43D	50D	
Water Absorption, % (24 hrs)	1.36	0.90	1.69	1.49	2.38	
MEK Double Rubs (#)	39	15	71	4	9	
T _g (DMA) = -48°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

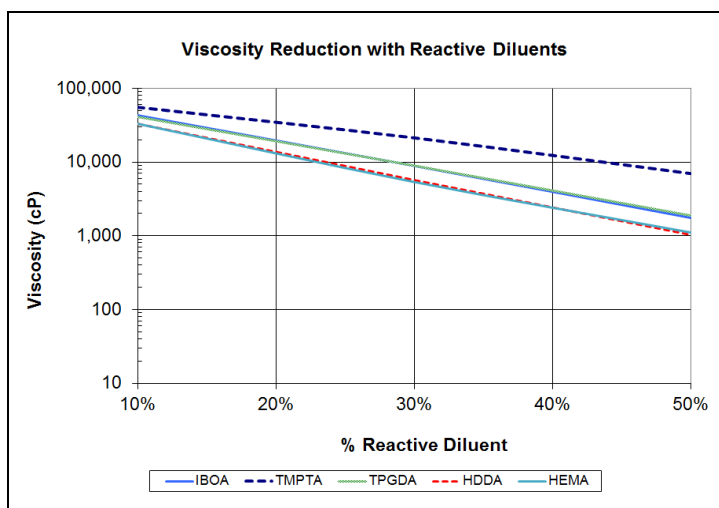
UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	7,700
Pt-Co (APHA) Color	30
Refractive Index (25°C)	1.470
Density, g/cm ³ (25°C)	1.020

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-3042	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 *	8,800	1,700	10	1,900	1,000	5,300

* Brookfield – CAP 2000+ @ 25°C.



Brookfield – CAP 2000+ @ 25°C

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Dymax Corporation
+1.860.482.1010 | info@dymax.com | www.dymax.com

Dymax Europe GmbH
+49 611.962.7900 | info_de@dymax.com | www.dymax.de

Dymax Engineering Adhesives Ireland Ltd.
+353 21.237.3016 | info_ie@dymax.com | www.dymax.ie

Dymax Oligomers & Coatings
+1.860.626.7006 | info_oc@dymax.com | www.dymax-oc.com

Dymax UV Adhesives & Equipment (Shanghai) Co. Ltd.
+86.21.37285759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax UV Adhesives & Equipment (Shenzhen) Co. Ltd.
+86.755.83485759 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia (H.K.) Limited
+852.2460.7038 | dymaxasia@dymax.com | www.dymax.com.cn

Dymax Asia Pacific Pte. Ltd.
+65.6752.2887 | info_ap@dymax.com | www.dymax-ap.com

Dymax Korea LLC
+82.2.784.3434 | info_kr@dymax.com | www.dymax.com/kr

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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 Safety Data Sheet before use.

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