

Bomar® BR-543 Aliphatic Urethane Acrylate

APPLICATIONS

- Foil Coatings
- Optical Coatings on Polycarbonate
- Weather-Resistant Coatings

FEATURES & BENEFITS

- Enhances Flexibility
- Abrasion Resistance
- Exhibits Hydrolytic Stability
- Provides Oil & Chemical Resistance

FEATURES & BENEFITS

- High Clarity
- High Tensile Strength
- Provides Excellent Weatherability

Bomar® BR-543 is a difunctional, aliphatic, polyether urethane acrylate. Films formulated with BR-543 exhibit superior physical and weathering capabilities. BR-543 may also be used to improve the flexibility, weathering, and adhesion characteristics of existing film and foil coatings.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	30,000
Pt-Co (APHA) Color	25
Refractive Index (25°C)	1.475
Density, g/cm ³ (25°C)	1.17

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-543	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C*	14,000	2,275	7,350	2,475	1,400

* Brookfield – Small Samples Adapter

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	900	2,018	1,072	1,879	1,516
Elongation, %**	200	226	2	22	6
Elastic Modulus, ksi**	0.9	5.1	79.5	32.0	47.8
Durometer Hardness	77A	49D	76D	58D	55D
Pencil Hardness [¥]	3B	HB	2B	2B	4B
MEK Double Rubs (#)	5	3	50	15	35
T _g (DMA)* = -52°C; Peak tan delta; cured with 2 phr of Omnirad™ 481					

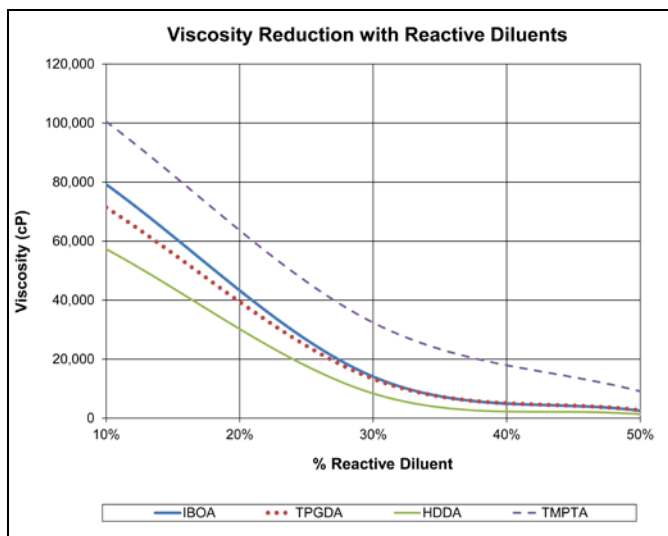
** Per ASTM D882

¥ Per ASTM D3363

FORMULATED ADHESION

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended



Brookfield –CAP2000+ @ 25°C

© 2012-2014 Dymax Corporation. All rights reserved. All trademarks in this guide, except where noted, are the property of, or used under license by Dymax Corporation, U.S.A. Omnirad™ is a trademark of IGM Resins, BV.

Technical data provided is of a general nature and is based on laboratory test conditions. Dymax does not warrant the data contained in this bulletin. Any warranty applicable to the product, its application and use is strictly limited to that contained in Dymax standard Conditions of Sale. Dymax does not assume responsibility for test or performance results obtained by users. It is the user's responsibility to determine the suitability for the product application and purposes and the suitability for use in the user's intended manufacturing apparatus and methods. The user should adopt such precautions and use guidelines as may be reasonably advisable or necessary for the protection of property and persons. Nothing in this communication shall act as a representation that the product use or application will not infringe on a patent owned by someone other than Dymax or act as a grant of license under any Dymax Corporation Patent. Dymax recommends that each user adequately test its proposed use and application before actual repetitive use, using the data in this communication as a general guideline. Technical Data Collection Prior to 2012 09/09/2014