

## Bomar<sup>®</sup> BR-7432GI30 Difunctional Aliphatic Polyester Urethane Acrylate

**APPLICATIONS**

- Coatings for metal and plastic
- Thermoforming coatings and inks
- Impact modifier for coatings, 3D printing resins, and peroxide-cured composites

**FEATURES**

- Imparts incredible toughness
- Low Tg
- Improves impact resistance
- Excellent cure response in LED conditions

**FEATURES**

- Adheres to polymer films
- Elastomeric
- Provides abrasion resistance

BR-7432GI30, an aliphatic polyester urethane diacrylate, formulates into applications requiring adhesion to various substrates and applications where excellent toughness and flexibility are required. The BR-7432GI30 backbone performs very well in extended weatherability studies. It is an excellent choice for impact and bend resistant coatings, and can act as an impact modifier for composite applications.

**UNCURED PROPERTIES**

Property	Value
Viscosity, cP (25°C)	69,000
Pt-Co (APHA) Color	35
Refractive Index (25°C)	1.483
Density, g/cm <sup>3</sup> (25°C)	1.110

**CURED MECHANICAL PROPERTIES**

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	2,200	Incompatible	4,400	3,100	3,200	Did not cure
Elongation, %**	180		4.0	20	11.0	
Elastic Modulus, ksi**	7		170	90	85	
Durometer Hardness	45D		83D	68D	72D	
Water Absorption, % (24 hrs)	0.66		0.66	0.67	0.57	
MEK Double Rubs (#)	6		>200	29	121	
T <sub>g</sub> (DMA) = 40°C; Peak tan delta; cured with 2 phr of Irgacure <sup>®</sup> 184						

\*\* Per ASTM D882

**ADHESION PROPERTIES**

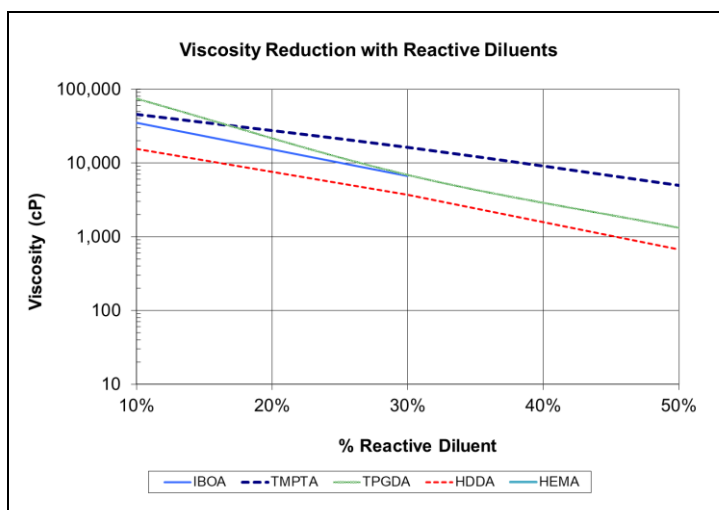
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS	✓✓✓	Incompatible	✓✓✓	✓✓✓	✓✓✓	Did not cure
Aluminum						
Cold Rolled Steel						
Glass						
HDPE						
PET	✓✓		✓✓	✓✓	✓✓	
PMMA	✓		✓	✓	✓	
Polycarbonate	✓		✓✓✓	✓✓✓	✓✓✓	
PVC			✓✓✓	✓✓✓	✓✓✓	
Stainless Steel						

✓ Recommended    ✓✓ Highly Recommended    ✓✓✓ Strongly Recommended

**TYPICAL FORMULATIONS**

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-7432GI30	70	50	50	50	50	70
IBOA	30	50				
TMPTA			50			
TPGDA				50		
HDDA					50	
HEMA						30
Omnirad <sup>™</sup> 184	2	2	2	2	2	2
Viscosity, 25°C *	6,700	Incompatible	5,000	1,300	700	Did not cure

\* 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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