

Bomar[®] XR-145S

Trifunctional Aliphatic Polyether Urethane Methacrylate

APPLICATIONS

- Coatings for glass
- Primer coatings

FEATURES

- Low viscosity
- Increases impact resistance

FEATURES

- Low skin irritation

XR-145S, a high molecular weight, trifunctional, aliphatic polyether urethane methacrylate, provides low formulation viscosity and moderate elongation. XR-145S shows adhesion to a variety of substrates, making it a candidate for consideration in mixed surface adhesion applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	60,000
Pt-Co (APHA) Color	20
Refractive Index (25°C)	1.471
Density, g/cm ³ (25°C)	1.06

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	1,100	3,600	4,500	2,200	2,000	1,200
Elongation, %**	60	120	3.5	11.8	3.5	60
Elastic Modulus, ksi**	10	75	180	55	80	20
Durometer Hardness	38D	53D	78D	64D	71D	52D
Water Absorption, % (24 hrs)	0.91	0.57	1.09	1.21	0.93	3.84
MEK Double Rubs (#)	5	4	>200	7	30	6
T _g (DMA) = 63°C; Peak tan delta; cured with 2 phr of Omnirad [®] 184						

** Per ASTM D882

ADHESION PROPERTIES

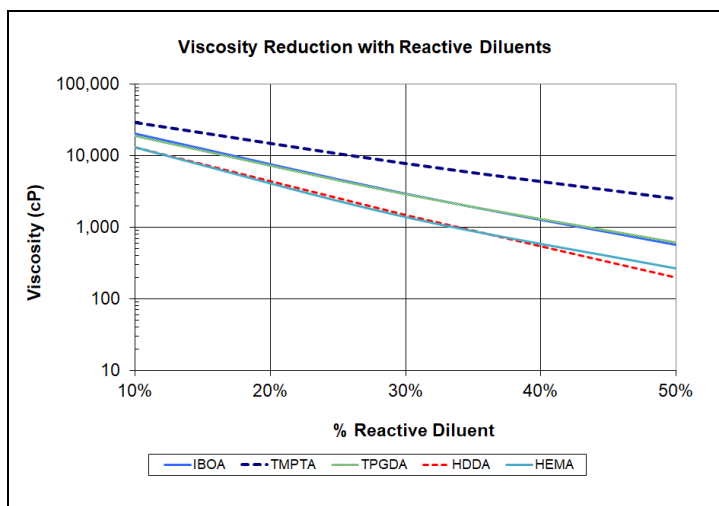
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS		✓	✓✓			
Aluminum						
Cold Rolled Steel						
Glass						
HDPE						
PET	✓	✓	✓✓✓		✓✓✓	✓
PMMA		✓	✓✓✓	✓✓	✓✓	
Polycarbonate		✓	✓	✓✓	✓✓✓	
Polypropylene						
PVC		✓			✓	
Stainless Steel		✓				

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
XR-145S	70	50	50	50	50	70
IBOA	30	50				
TMPTA			50			
TPGDA				50		
HDDA					50	
HEMA						30
Omnirad [™] 184	2	2	2	2	2	2
Viscosity, 25°C *	3,000	600	2,500	600	200	1,400

* 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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