

## Bomar™ LS® XR-144 Light-Sensitive Trifunctional Aliphatic Urethane Acrylate

**APPLICATIONS**

- Wood Coatings
- Furniture Coatings
- Graphic Arts

**FEATURES & BENEFITS**

- Abrasion Resistance
- Solvent Resistance
- Ultra-Low Leaching

Bomar™ LS® XR-144, a medium molecular weight, trifunctional, aliphatic polyether urethane acrylate oligomer with backbone-grafted photoinitiator is a developmental product showcasing Bomar's Light-Sensitive technology. Compare this oligomer to its conventional counterpart, Bomar BR-144, to see the advantages that LS® systems have over conventional formulations.

**UNCURED PROPERTIES**

Property	Value
Viscosity, cP (50°C)	125,000
PT-Co (APHA) Color	<50
Refractive Index (25°C)	1.4883
Density, g/cm <sup>3</sup> (25°C)	1.10

**TYPICAL FORMULATIONS**

Test Formulation Name	I30	I50	TM50	TP50	H50
LS® XR-144	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad™ 481	-	-	-	-	-
Viscosity, 25°C*	28,000	1,900	6,300	1,300	400

\* Brookfield – Small Samples Adapter

**CURED MECHANICAL PROPERTIES**

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	7,500	7,500	N/A	4,000	2,100
Elongation, %**	7	7	N/A	5	2
Elastic Modulus, ksi**	10	8	N/A	140	110
Durometer Hardness	77D	82D	65D	64D	67D
MEK Double Rubs (#)	130	25	>200	180	>200

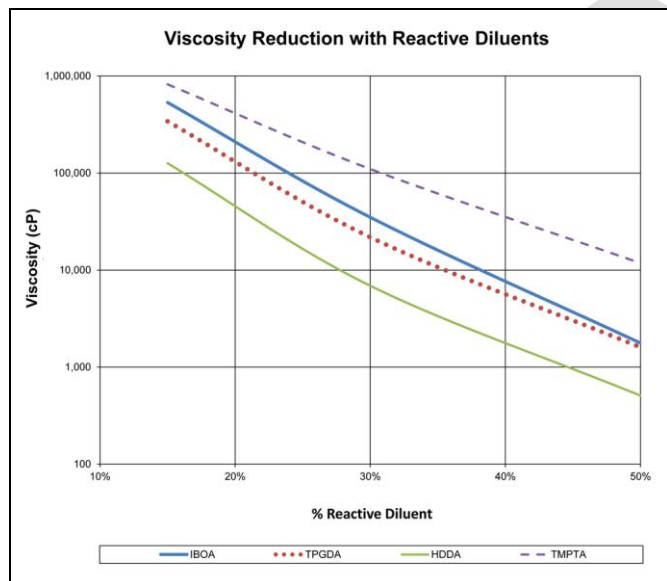
T<sub>g</sub> = 51 °C; Peak tan delta

\*\* Per ASTM D882

**ADHESION PROPERTIES**

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

✓ Recommended    ✓✓ Highly Recommended    ✓✓✓ Strongly Recommended



Brookfield – CAP2000 + @ 25°C

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