

Bomar[®] BRS-14320S Silicone Urethane Acrylate

APPLICATIONS

- Low Polarity Coatings
- High-Temperature Applications
- Thermoforming Coatings & Inks

FEATURES

- Low Shrinkage
- Enhances Flexibility
- Improves Adhesion

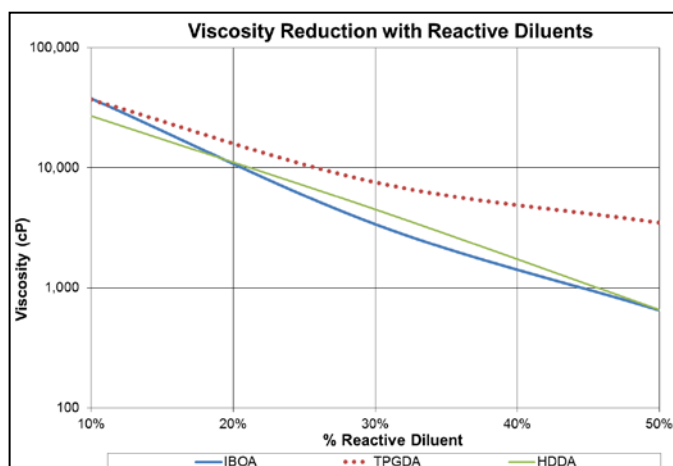
FEATURES

- Exhibits Hydrolytic Stability
- Provides Excellent Chemical and Temperature Resistance

Bomar[®] BRS-14320S is a difunctional oligomer that combines a robust silicone backbone into a urethane acrylate oligomer. The resulting product provides an unusual combination of desirable properties: softness, flexibility, and temperature resistance. BRS-14320S is a candidate for consideration in formulating 100% UV soft-touch coatings and also for electronics applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	18,000
Pt-Co (APHA) Color	40
Refractive Index (25°C)	1.425
Density, g/cm ³ (25°C)	1.12



Brookfield – CAP2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50*	H50*
BRS-14320S	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Irgacure [®] 481	2	2	2	2	2
Viscosity, 25°C*	1,750	375	Not Tested	950	625

* Brookfield – Small Samples Adapter

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50*	H50*
Tensile Strength, psi**	632	1,494	Incompatible	577	812
Elongation, %**	378	244		14	8
Elastic Modulus, ksi**	0.95	3.96		17.4	37.9
Durometer Hardness	46A	35D		31D	30D
MEK Double Rubs (#)	3	3		55	33
T _g (DMA)	-112°C; Peak tan delta; cured with 2 phr of Irgacure [®] 481				

** Per ASTM D882

* These solutions are hazy but homogeneous

ADHESION PROPERTIES

Substrate	I30	I50	TM50	TP50*	H50*
ABS	✓✓	✓			
Acrylic (PMMA)	✓✓✓	✓✓✓			
Aluminum	✓✓✓	✓✓✓		✓	✓
Cold Rolled Steel	✓✓✓	✓✓✓		✓	✓✓
Glass	✓✓✓	✓✓✓			
HDPE	✓	✓✓			
Polycarbonate	✓✓	✓✓			✓
Stainless Steel	✓✓✓	✓✓✓		✓	✓

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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