

Bomar[®] BR-970H Multifunctional Acrylates

APPLICATIONS

- Inkjet printing
- Graphic Arts
- Electronics
- Automotive

FEATURES

- Very low viscosity
- High modulus
- Higher heat distortion temperature
- Hydrolytic stability

FEATURES

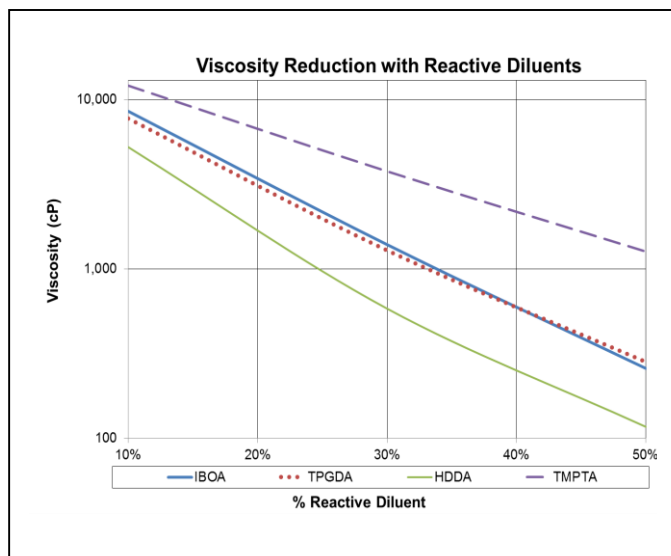
- Rapid cure
- Non-yellowing
- Abrasion & Chemical Resistance
- Stain Resistance

Bomar[®] BR-970H is a low viscosity, difunctional, aliphatic urethane acrylate. BR-970H has high modulus and doesn't necessarily need to be blended with other oligomers to achieve a balance of toughness and flexibility. BR-970H offers rapid cure and non-yellowing properties where premium performance is required. This oligomer is perfect for 2D and 3D inkjet applications as well for use in Graphic Arts application. This oligomer can also be used in electronics, and automotive applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	24,000
Pt-Co (APHA) Color	66
Refractive Index (25°C)	1.49
Density, g/cm ³ (25°C)	1.2

Brookfield – CAP 2000+ @ 25°C



Brookfield – CAP 2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TP50	TM50	H50	HE30
BR-970H	70	50	50	50	50	70
IBOA	30	50				
TMPTA				50		
TPGDA			50			
HDDA					50	
HEMA						30
Irgacure [®] 184	2	2	2	2	2	2
Viscosity, cP 25°C *	1,395	259	283	1264	117	104

* Brookfield – CAP 2000+ @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50	TP50	TM50	H50	HE30
Tensile Strength, psi**	4,578	5,354	3,855	6,381	4,681	3,433
Elongation, %**	6.5	4.5	11	3.3	5.2	10
Elastic Modulus, ksi**	211	222	201	278	179	195
Durometer Hardness	83D	84D	84D	90D	83D	82D
Water Absorption, % (24 hrs)	0.26	0.20	0.39	0.35	0.31	1.39
MEK Double Rubs (#)	34	15	154	>200	>200	40

$T_g = 70^\circ\text{C}$ (DMA); Peak on delta; HDT = 44°C @ 66 psi (DMA).

** Per ASTM D882

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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