

Bomar[®] BR-970BT Difunctional Aliphatic Urethane Acrylate

APPLICATIONS

- Inkjet printing
- Graphic arts
- Rapid prototyping 3D printing resins

FEATURES

- Low viscosity
- Hydrolytic stability
- Abrasion and chemical resistant
- Excellent cure response

FEATURES

- Glossy finish
- Non-yellowing
- Stain resistant
- Impact resistant

BR-970BT is a low molecular weight, difunctional, aliphatic urethane acrylate. BR-970BT can be blended with other oligomers to achieve a balance of toughness and flexibility. BR-970BT offers rapid cure and low yellowing properties where premium performance is required.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	10,000
Pt-Co (APHA) Color	30
Refractive Index (25°C)	1.489
Density, g/cm ³ (25°C)	1.12

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	3,200	5,700	7,800	4,000	5,700	2,500
Elongation, %**	35	6.0	4	15	11	65
Elastic Modulus, ksi**	120	240	290	150	170	30
Durometer Hardness	75D	82D	88D	77D	80D	59A
Water Absorption, % (24 hrs)	0.31	0.22	0.40	0.52	0.36	2.14
MEK Double Rubs (#)	16	19	>200	79	>200	11
T _g (DMA) = 59°C; Peak tan delta; cured with 2 phr of Omnirad™ 184						

** Per ASTM D882

ADHESION PROPERTIES

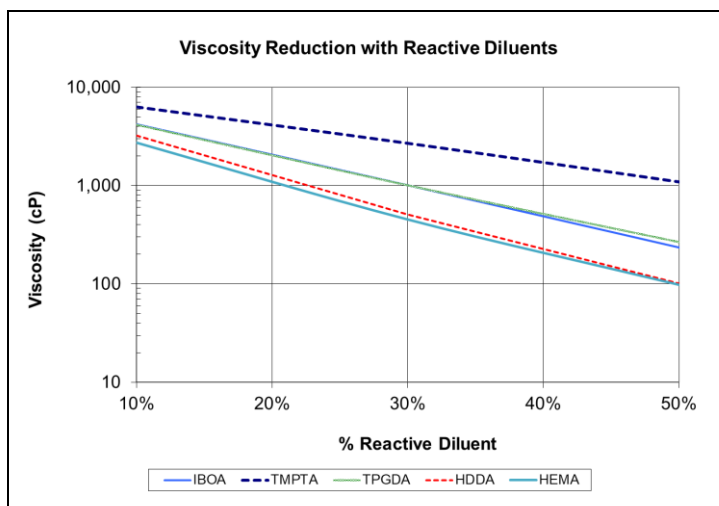
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS			✓✓✓	✓✓	✓✓✓	
Aluminum						
Cold Rolled Steel						
Glass						
HDPE						
PET	✓✓	✓✓✓	✓✓	✓✓✓	✓✓✓	✓
PMMA			✓✓✓	✓	✓✓	
Polycarbonate	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	
Polypropylene						
PVC	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	
Stainless Steel						

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-970BT	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 *	1,000	230	1,100	270	100	500

* 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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