

Bomar[®] BR-744BT Polyester Urethane Acrylate

APPLICATIONS

- Nail Gel Coating
- Vacuum Metalized Coatings
- Plastic Coatings
- Elastomers
- UV Pressure-Sensitive Adhesives (PSAs)

FEATURES

- Improves Adhesion
- Enhances Flexibility
- Provides Impact Resistance
- Non-Yellowing

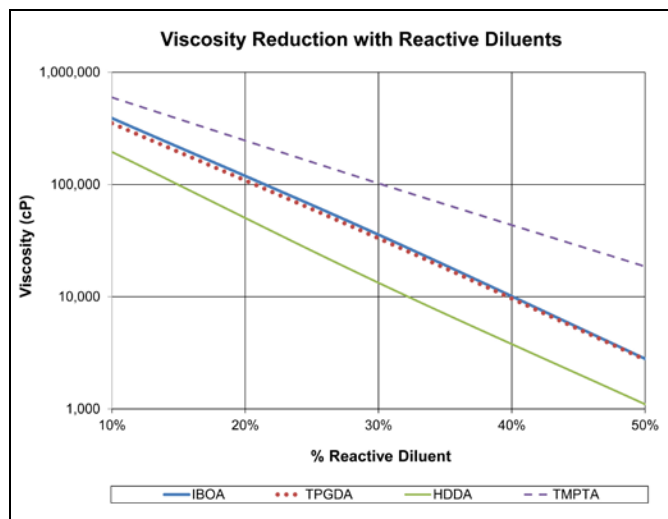
FEATURES

- Provides Weather Resistance
- Gloss Finish
- Low Skin Irritation
- Low MEHQ Levels

Bomar[®] BR-744BT is an aliphatic difunctional polyester urethane acrylate offering excellent adhesion, and flexibility. While not limited to the applications, BR-744BT is an effective choice in optical coating for plastics and UV pressure-sensitive adhesives. Provides solvent resistance, is durable, and has high gloss in ink and coating applications. This material has low skin sensitivity for dental and cosmetic applications, and is INCI listed.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	44,500
Pt-Co (APHA) Color	<100
Refractive Index (25°C)	1.484
Density, g/cm ³ (25°C)	1.03



Brookfield –CAP2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50
BR-744BT	70	50	50	50	50
IBOA	30	50			
TMPTA			50		
TPGDA				50	
HDDA					50
Omnirad [™] 481	2	2	2	2	2
Viscosity, 25°C*	38,000	2,800	13,500	2,700	1,050

* Brookfield – CAP2000+ @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50
Tensile Strength, psi**	2,500	2000	2,700	1,600	1,900
Elongation, %**	407	285	3.5	26.5	6
Elastic Modulus, ksi**	1.4	6.9	88.9	29.2	52.4
Durometer Hardness	69A	51D	78D	55D	64D
MEK Double Rubs (#)	3	2	>200	40	>200
T _g (DMA) = -18°C; Peak tan delta; cured with 2 phr of Omnirad [™] 481					

** Per ASTM D882

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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