

Bomar[®] BR-5825I30 Difunctional Aliphatic Polyether Urethane Acrylate

APPLICATIONS

- Weather-resistant outdoor coatings
- Optical adhesives
- Flexible packaging films
- Plastic coatings

FEATURES

- Low color
- Good balance of toughness and flexibility
- Oil and chemical resistance

FEATURES

- Impacts excellent toughness
- Multifunctional for improved cure speed
- Adhesion to plastics

BR-5825I30 was designed to be a low viscosity equivalent to BR-582. BR-5825I30 offers an excellent combination of toughness and flexibility, with the added advantage of lower formulation viscosity. BR-5825I30 is low in color and provides excellent weatherability.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (60°C)	3,000
Pt-Co (APHA) Color	39
Refractive Index (25°C)	1.490
Density, g/cm ³ (25°C)	1.030

CURED MECHANICAL PROPERTIES

Property	I30	I50	TM50	TP50	H50	HE30
Tensile Strength, psi**	3,300	3,600	6,400	2,800	3,800	900
Elongation, %**	130	110	4.0	14.0	7.0	110
Elastic Modulus, ksi**	50	160	220	110	120	5
Durometer Hardness	65D	79D	86D	75D	78D	45D
Water Absorption, % (24 hrs)	0.35	0.20	0.52	0.47	0.35	1.58
MEK Double Rubs (#)	46	32	>200	53	>200	50

T_g (DMA) = 46°C; Peak tan delta; cured with 2 phr of Irgacure[®] 184

** Per ASTM D882

ADHESION PROPERTIES

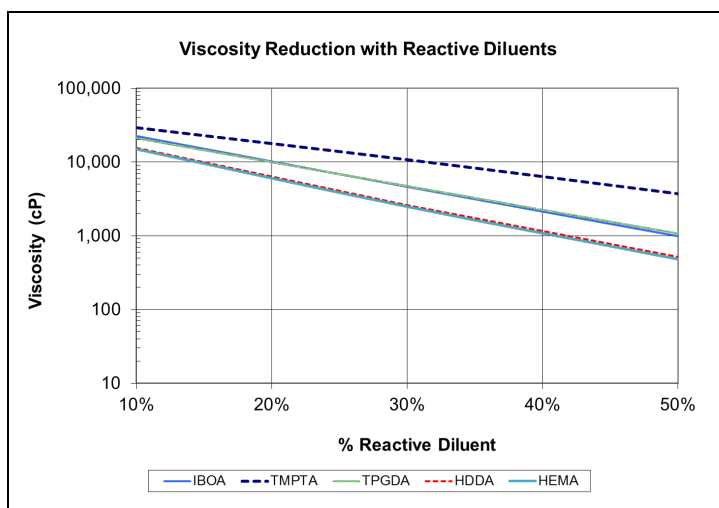
Substrate	I30	I50	TM50	TP50	H50	HE30
ABS	✓✓✓	✓✓✓	✓✓✓	✓	✓	
Aluminum	✓	✓✓				
Cold Rolled Steel	✓✓	✓✓				
Glass	✓	✓✓				
HDPE						
PET	✓	✓✓				
PMMA	✓✓	✓				
Polycarbonate	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	
Polypropylene						
PVC	✓✓	✓✓	✓✓✓	✓	✓✓✓	
Stainless Steel	✓	✓✓				

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TM50	TP50	H50	HE30
BR-5825I30	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, 25°C *	4,600	1,000	3,800	1,100	500	2,500

* Brookfield – CAP 2000+ @ 25°C.



Brookfield – CAP 2000+ @ 25°C

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