

BOMAR™ BR-742M Aliphatic Polyurethane Methacrylate

APPLICATIONS

- Coatings for Metals
- Coatings for Glass

FEATURES & BENEFITS

- Improves Adhesion
- Balance of Hardness and Flexibility

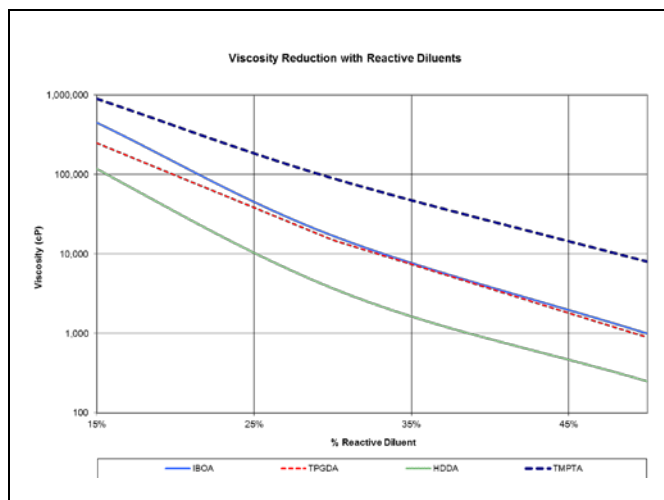
FEATURES & BENEFITS

- Low Skin Irritation
- Non-Yellowing
- Low Skin Sensitivity

BOMAR™ BR-742M is a medium molecular weight, difunctional, aliphatic polyester urethane methacrylate offering excellent adhesion, flexibility, and hardness balance. It can be effectively formulated for adhesion to steel, aluminum, and glass. Due to its low solvent resistance, it can be formulated into solvent strippable temporary coatings. This material has low skin sensitivity for dental and cosmetic applications.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	100,000
Pt-Co (APHA) Color or Gardner Color	<50
Refractive Index (25°C)	1.485
Density, g/cm ³ (25°C)	1.11



Brookfield – CAP

TYPICAL FORMULATIONS

Test Formulation Name	I30	I50	TP50	TM50	HE30
BR-742M	70	50	50	50	70
IBOA	30	50			
TMPTA				50	
TPGDA			50		
HEMA					30
Omnirad™ 481	2	2	2	2	2
Viscosity, 25°C *	22,500	1,550	1,687	9,000	4,250

* Brookfield – CAP

CURED MECHANICAL PROPERTIES

Property	I30	I50	TP50	TM50	HE30
Tensile Strength, psi**	2,100	2,075	1,130	2,450	1,300
Elongation, % [^]	60	20	10	4.5	100
Elastic Modulus, ksi [^]	10	45	20	64	5
Durometer Hardness	79D	82D	76D	90D	77D
MEK Double Rubs (#)	26	13	15	>200	25
T _g (DMA) = 65°C; Peak tan delta; cured with 2 phr of Omnirad™ 481					

** Per ASTM D882
[^] Per ASTM D3363

ADHESION PROPERTIES

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

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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