

Bomar™ BDT-1006 Dendritic Acrylate Oligomer

APPLICATIONS

- **Hard, Protective Coatings**
- **Overprint Varnishes**
- **Printing Inks**

FEATURES & BENEFITS

- **Very Good Chemical Resistance**
- **Very Good Thermal Resistance**
- **Low Viscosity**
- **Abrasion & Scratch Resistant**

FEATURES & BENEFITS

- **Low Shrinkage**
- **Rapid Cure**
- **Low Oxygen Inhibition**
- **Tin Free**

Bomar™ BDT-1006 is a dendritic acrylate with an average functionality of 6. The hyper-branched structure of BDT-1006 imparts the unique combination of low diluted viscosity with unmatched chemical and thermal resistance, which is ideal in applications where withstanding exposure to the harshest conditions is paramount. Great for high-temperature applications because thermogravimetric analysis indicates the oligomer doesn't decompose until 390 °C.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (25°C)	1500
Color, APHA	50
Refractive Index (20°C)	1.493
Density, g/cm ³ (25°C)	1.12

TYPICAL FORMULATIONS

Test Formulation Name	I30	H50	TP50	TM50
BDT-1006	70	50	50	50
IBOA	30			
TMPTA				50
TPGDA			50	
HDDA		50		
Omnirad™ 481	1	1	1	1
Viscosity, 25°C *	110	40	73	150

* CAP2000+ @ 25°C

CURED MECHANICAL PROPERTIES

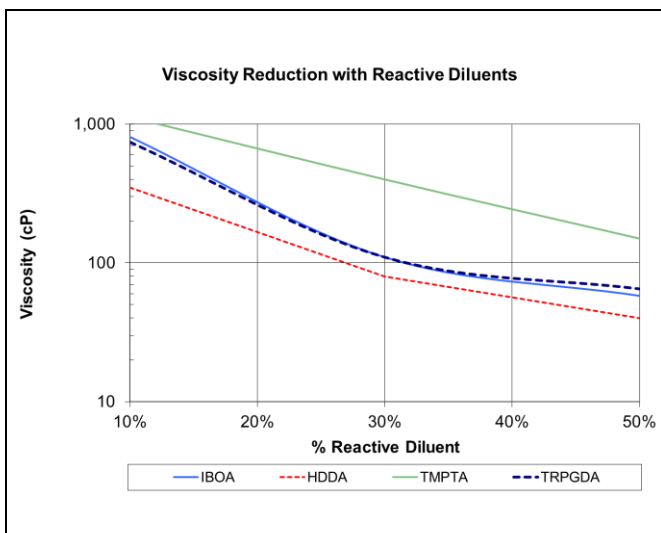
Property	I30	H50	TP50	TM50
Tensile Strength, psi**	2490	1840	2545	2550
Elongation, %**	3	2.5	4	3
Elastic Modulus, ksi**	85	81	84	105
Durometer Hardness	90D	90D	89D	94D
MEK Double Rubs (#)	>200	>200	180	>200
T _g (DMA) = >100°C; Peak tan delta; cured with 1 phr of Omnirad™ 481				

** Per ASTM D882

ADHESION PROPERTIES

Substrate	I30	H50	TP50	TM50
Aluminum		X		
Cold Rolled Steel	XXX	XXX		
Glass				
HDPE		XX	XX	XX
Polycarbonate	XXX	XXX	XXX	XXX
Stainless Steel	XXX			XXX

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended



CAP2000+ @ 25°C

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