

Bomar™ BDT-4330 Dendritic Acrylate Oligomer

APPLICATIONS

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

FEATURES & BENEFITS

- **Excellent Chemical Resistance**
- **Excellent Thermal Resistance**
- **Low Diluted Viscosity**
- **Abrasion & Scratch Resistant**

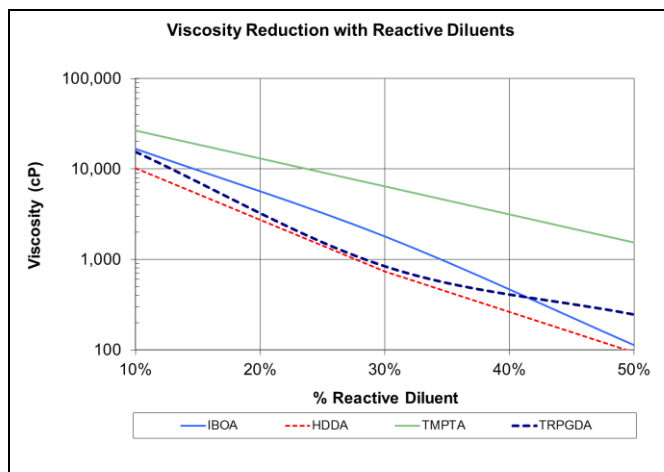
FEATURES & BENEFITS

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

Bomar™ BDT-4330 is a dendritic acrylate with an average functionality of 30. The hyper-branched structure of BDT-4330 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 419 °C.

UNCURED PROPERTIES

Property	Value
Viscosity, cP (50°C)	4000
Color, APHA	50
Refractive Index (20°C)	1.496
Density, g/cm ³ (25°C)	1.15



CAP2000+ @ 25°C

TYPICAL FORMULATIONS

Test Formulation Name	I30	H50	TP50	TM50
BDT-4330	70	50	50	50
IBOA	30			
TMPTA				50
TPGDA			50	
HDDA		50		
Omnirad™ 481	1	1	1	1
Viscosity, 25°C *	1800	94	246	1544

* CAP2000+ @ 25°C

CURED MECHANICAL PROPERTIES

Property	I30	H50	TP50	TM50
Tensile Strength, psi**	2040	1950	1880	2100
Elongation, %**	2	2	2	2
Elastic Modulus, ksi**	81	120	106	104
Durometer Hardness	94D	92D	92D	96D
MEK Double Rubs (#)	>200	56	>200	>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				
Cold Rolled Steel			x	x
Glass				
HDPE		xxx	xx	xxx
Polycarbonate		xxx	xxx	xxx
Stainless Steel	xxx	xxx	xxx	xxx

✓ Recommended ✓✓ Highly Recommended ✓✓✓ Strongly Recommended

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