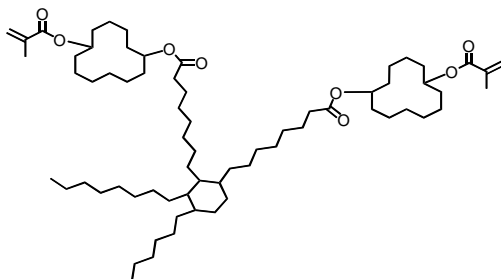


TECH DATA SHEET

PEM-1066



10080 Willow Creek Road
San Diego, CA 92131
858-348-1122
www.designermoleculesinc.com

DESCRIPTION

PEM-1066 is a polyester methacrylate that exhibits excellent adhesion, ultra low warpage, and hydrophobicity. The oligomer has high thermal stability, low volatility, and excellent hydrolytic resistance. It can be used as a base oligomer in a formulation or as an additive.

HIGHLIGHTS

• Low modulus	• High adhesion to various substrates
• Hydrophobic	• Adhesion to metals
• Excellent hydrolytic resistance	• Flexibilizer

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	METHOD	RESULT
Appearance at Room Temperature	Visual	Light yellow liquid
Viscosity @ 25°C	Brookfield C/P	16,500 cps
Functionality		2
Molecular Weight		1066
Weight Loss @ 300°C	TGA	< 3.0%
Decomposition Temperature	TGA	> 300°C
Recommended Storage Temp		10°C or below
PHYSIOCHEMICAL (POST CURE)		
Glass Transition Temperature cured with 2% Dicumyl Peroxide	TMA DMA	-8°C 10°C
Coefficient of Thermal Expansion cured with 2% Dicumyl Peroxide	TMA	α_1 88 ppm/°C α_2 247 ppm/°C
Dynamic Tensile Modulus Cured with 2% Dicumyl Peroxide	Rheometrics Rheometer	2.64 GPa 0.41 GPa
	-65°C 25°C	

Data is for reference only and may vary depending on testing method used. The structure shown above is an idealized representation of a statistical distribution.

RECOMMENDED FORMULATION USE:

PEM-1066 is recommended for use as a base resin or an additive to reduce stress. It has excellent adhesion on most substrates. It has superior hydrolytic resistance due to the secondary alcohol ester residues in the backbone. The oligomer has good solubility in both aliphatic and aromatic resins.

CONTACT:

REQUEST A SAMPLE OR PLACE AN ORDER

Dawn Butts

☎ 858-348-1122 ext. 4726

✉ dbutts@designermoleculesinc.com

REF: DMI Part Number: R1157

• 10080 Willow Creek Road • San Diego, CA 92131 • Tel: (858) 348-1122 • Fax: (858) 348-1123 •