

## Product Data Sheet

### NEMCON™ H PA DP117/X3

Nemcon™ H-series products are designed for use in high performance structural assemblies where heat removal is desired for complete metal replacement. Nemcon™ H PA DP117/X3 is a thermally conductive polyphthalamide, offering excellent chemical resistance, good stiffness and high HDT. It should be used in structural applications where thermal management must be accomplished.

Properties*	Standard	Unit	Typical Value
<b>Physical</b>			
Specific Gravity	D 792	-	1.56
<b>Mechanical</b>			
Tensile Stress @ brk, 50 mm/min	D 638	MPa.	42
Tensile Strain @ brk, 50 mm/min	D 638	%	1.3
Tensile Modulus, 50 mm/min	D 638	MPa.	4630
Flexural Stress @ brk, 1.3 mm/min, 50 mm span	D 790	MPa.	90
Flexural Modulus, 1.3 mm/min, 50 mm span	D 790	MPa.	4740
Izod Impact, notched @ 23°C	D 256	ft-lb/in.	1.05
<b>Thermal</b>			
HDT @ 264 psi, 3.2 mm, unannealed	D 648	°C	125
<b>Conductivity</b>			
Thermal Conductivity	E 1461	W/mK	1.25
Electrical - Surface Resistivity	D 257	Ohms/sq.	6.0E+12

\*All properties are measured after 48 hours of conditioning at 23°C and 50% relative humidity. All samples are prepared according to ASTM standards. Variations within normal tolerances are possible for various types of colors and functional properties like UV resistance.

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