

# NeoNxGen™ Thermal Management Solutions

TECHNICAL DATA SHEET 600

### **Product Overview**

eGRAF® NeoNxGen™ thermal management solutions family of products have been designed to provide a high performance, thick flexible graphite material for the most demanding thermal management challenges in the consumer electronics, medical, automotive, and energy storage applications. This new type of high-performance graphite enables single layer solutions where multiple layers of graphite were previously required. NeoNxGen graphite can be die-cut, or laminated with plastics and/or adhesives etc. to create easy to install solutions.

## Typical Properties<sup>[1]</sup>

CHARACTERISTIC	UNIT	N-80	N-100	N-150	N-270
Thickness*	mm	$0.080 \pm 0.010$	$0.100 \pm 0.010$	$0.150 \pm 0.015$	0.270 ± 0.025
Thermal Conductivity <sup>[2]</sup> In Plane • Through-Plane	W/mK	900 • 4.5	1100 • 4.5	1100 • 4.5	1100 • 4.5
Roll Width*	mm	240	240	200	200
Roll Length*	m	100			
Density	g/cm³	2.0			
Bend Cycling [3] R4mm, 185°	cycles	>200,000 with No Change in Thermal Resistance			
Flammability Rating	UL	94 V-0			
Operating Temperature	°C	-40 to +400			
Lead / Halogen Free	-	Yes			
RoHS Compliant	-	Yes			

#### Notes

- [1] Properties listed are typical and cannot be used as acceptance or rejection criteria. Product characteristics exclude coatings and adhesives.
- [2] In-plane thermal conductivity determined by 'NeoGraf Standard Method for Determination of Thermal Conductivity'; through-plane thermal conductivity determined using ASTM D5470 Modified method.
- [3] Testing completed on N-150 grade with 10 micron thick PET film (P22 per NeoGraf Technical Data Sheet 322) adhered to both sides of the graphite.

## LEAD. CREATE. CONNECT.

+1 (800) 253.8003 (Toll-Free in USA) | +1 (216) 529.3777 (International) www.neograf.com | info@neograf.com

©2023 NeoGraf Solutions, LLC (NGS). This information is based on data believed to be reliable, but NeoGraf Solutions, LLC makes no warranties, express or implied, as to its accuracy and assumes no liability arising out of its use. The data listed falls within the normal range of product properties but should not be used to establish specification limits or used alone as the basis of design. NeoGraf Solutions, LLC liability to purchasers is expressly limited to the terms and conditions of sale. eGraf®, Graf+®, GrafGuard®, GraFoil®, and GrafCell® are registered trademarks of NeoGraf Solutions, LLC. NeoNxGen™, SpreaderShield™, HiTherm™, Graf+X™, Graf-M™ are trademarks of NeoGraf Solutions, LLC. These trademarks are not a comprehensive listing of all NeoGraf products or trademarks used or owned by NeoGraf Solutions, LLC. eGraf®, NeoNxGen™, SpreaderShield™, HiTherm™, Graf+®, Graf-X™, Graf-M™, Graf-Guard®, GraFoil®, and GrafCell® products, materials, and processes are covered by several US and foreign patents. For patent information www.neograf.com.

<sup>\*</sup> Customized thickness and roll dimensions may be available