

# THERMAL CONDUCTIVITY

LNP™ KONDUIT™ COMPOUNDS FOR THERMALLY CONDUCTIVE APPLICATION

# LNPT™ KONDUIT™ COMPOUNDS BASED ON PA, PPS AND PC

KONDUIT™ compounds could offer up to seven times the thermal conductivity of typical unfilled thermoplastics, thermosets and epoxies. Heat transfer models confirm that KONDUIT™ thermal conductivity (TC) is significant since most heat transfer applications are limited by convection, creating opportunities for component re-design, consolidation and miniaturization.



## TYPICAL INDUSTRY REQUIREMENTS:

- Effective thermal management
- Sustainable materials

## TYPICAL MATERIAL CHARACTERISTICS:

- TC values up to 18 W/mK
- No painting needed
- Electrical isolative, avoids extra housing

## TYPICAL PROPERTIES OF LNPT™ KONDUIT™ COMPOUNDS:

KONDUIT™	MATERIAL	THERMAL CONDUCTIVITY In plane / Through plane (HOTDISK TPS2500) (W/mK)	MINIMUM THICKNESS FOR UL94 V0  (mm)	GLOW WIRE FLAMMABILITY INDEX  (°C @ mm)	COLOR	ELECTRICAL
PX11311U	PA6	1.5 / 0.8	1.0	960@1	Light	Isolative
OX11314	PPS	1.9 / 0.7	0.8	RTI 130	Light	Isolative
DTK22	PC	2 / 0.6	HB@0.5	850@0.8	Light & Grey	Isolative
PX13012	PA6	5.5 / 1.2	0.8	960@0.8	Dark	Isolative
OX10324	PPS	18 / 1.3	1.2	RTI 130	Dark	Conductive

**DISCLAIMER:** Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right. SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates, unless otherwise noted.

© 2017 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.  
Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.