# **Boron Nitride Thermal Management**

## **TECHNICAL DATA**

### **HIGH THERMAL PERFORMANCE**

The K-Series portfolio of thermally conductive boron nitride (BN) powders offers a range of physical properties to meet the most demanding requirements for thermal interface materials. BN powders inherently offer excellent thermal conductivity and electrical isolation, which are enhanced by the variety of grades suited for your specific processing requirements.

#### **GENERAL PROPERTIES**

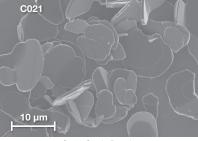
- High thermal conductivity
- · High electrical insulating effect
- Good connection to the plastic matrix
- High process reliability
- Low to high viscosity polymers

**TYPICAL PHYSICAL PROPERTIES** 

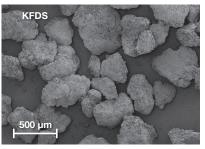
• Lubricating properties

### APPLICATIONS

- Thermal interface materials
- Potting and melding compounds
- Printed circuit boards
- Thermally conductive and dielectric thermoplastic polymers







#### KFDS Grade Powder

	D10 (µm)	D50 (µm)	D90 (µm)	Tap Density g/cm³	Surface Area m²/g	BN Content %	B203 %	0 <sub>2</sub> %
Platelets	·							
M120	2	5.5	11	0.27	15.00	98.0%	0.80	1.10
B150	2	5.5	11	0.20	12.00	98.0%	0.80	1.30
P050	3	6.5	15	0.20	5.00	98.0%	0.30	1.20
C020	4	12	35	0.52	1.83	99.0%	0.15	0.80
C021	5	16	37	0.81	1.23	99.0%	0.15	0.59
C022	6	20	41	0.57	0.35	99.0%	0.15	0.72
Low-Density Agglomerate								
KFDS80	40	80	120	0.40	2.70	99.5%	0.06	0.24
KFDS150	90	150	230	0.40	2.70	99.5%	0.06	0.24
Medium-Density Agglomerate								
KFAS80	40	80	120	0.80	1.30	99.6%	0.16	0.30
KFAS150	90	150	230	0.80	1.30	99.6%	0.16	0.30
High-Density Agglomerate								
KFNAS80	40	80	120	1.10	1.10	99.6%	0.05	0.30
KFNAS150	90	150	230	1.10	1.10	99.6%	0.05	0.30
<b>NOTE</b> : This data shows typical values and does not represent a specification.								

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