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3M Advanced Materials Division

3M™ Boron Nitride Cooling Filler

Flakes 200-3

Introduction

- Flakes with mean flakes size 180 µm made of 3 µm primary platelets

Typical applications (non-limiting):

- Potting resin parts with high through-plane thermal conductivity
- Boost thermal conductivity of compounds as secondary filler

Compatible matrix materials (non-limiting):

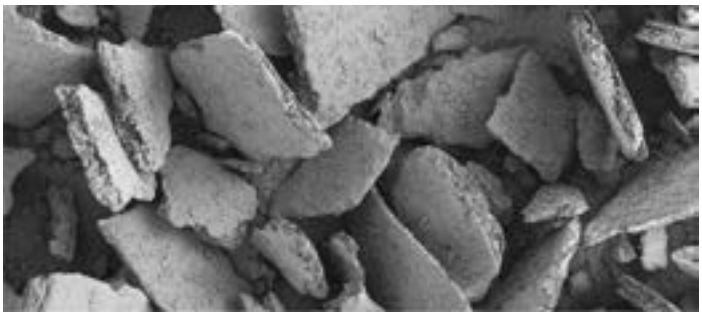
- Thermoplastics (preferentially as booster)
- Thermosets (preferentially as booster)
- Elastomers (preferentially as booster)

Typical Physical Properties

(Not for specification purposes)

O	<0.7%
C	<0.2%
B_2O_3	<0.1%
BN	>98.5%

BN content is calculated as (100% minus B_2O_3, O, C, Si, Al, Fe, Ca, without loss on drying)



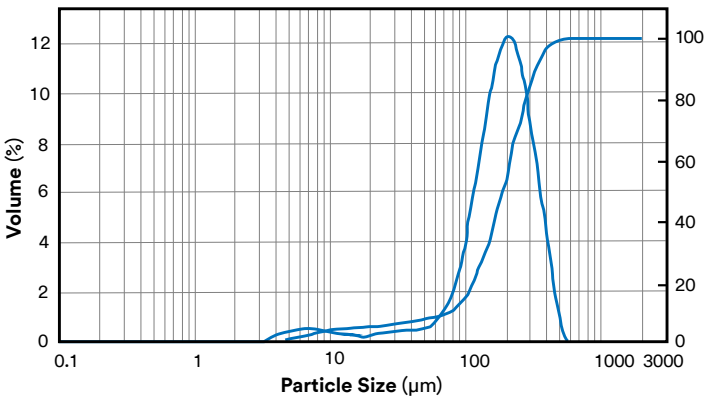
Characteristics

(Not for specification purposes)-

3M Boron Nitride Cooling Filler Flakes 200-3 7010288273	Minimum	Maximum
Particle Size Distribution d(0.1) (µm)	5	120
Particle Size Distribution d(0.5) (µm)	140	240
Particle Size Distribution d(0.9) (µm)	n.a.	450
(Untapped) bulk density (DIN) (g/cm³)	0.3	0.6
Specific Surface Area (m^2/g)	2	10

Bulk density determined according to ISO 23145-2 (DIN density)
Particle size distribution measured by laser light scattering (Mastersizer 2000, dry, 0.1 bar)
For calculation purpose: Density of bulk hBN 2.25 g/cm³

Particle Size Distribution



Particle size distribution measured by laser light scattering (Mastersizer 2000, dry, 0.1 bar)

Refer to the 3M Boron Nitride Cooling Filler Safety Data Sheet **for safety information.**

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