

3M Advanced Materials Division

3M™ Boron Nitride Cooling Filler Flakes 500-15

Introduction

- Flakes with mean flakes size 310 µm made of 15 µm primary platelets

Typical Applications (non-limiting):

- For potting resin parts with high through-plane thermal conductivity
- Boost thermal conductivity of compounds as secondary filler
- Better for lower viscosities

Compatible Matrix Materials (non-limiting):

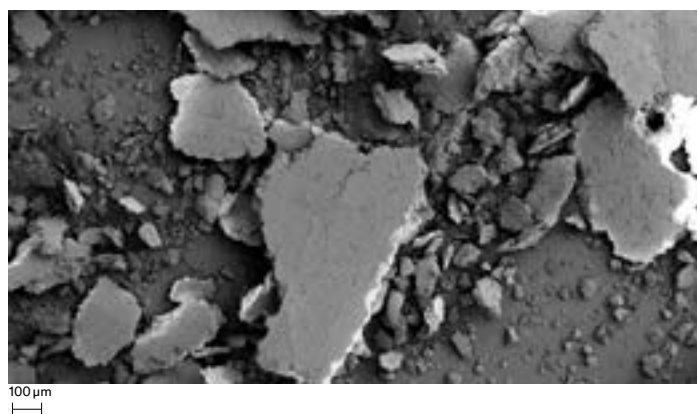
- Thermoplastics (preferentially as booster)
- Thermosets (preferentially as booster)
- Elastomers (preferentially as booster)

Typical Physical Properties

(Not for specification purposes)

O	<0.7%
C	<0.2%
B ₂ O ₃	<0.1%
BN	>98.5%

BN content is calculated as (100% minus B₂O₃, O, C, Si, Al, Fe, Ca, without loss on drying)



Characteristics

(Not for specification purposes)

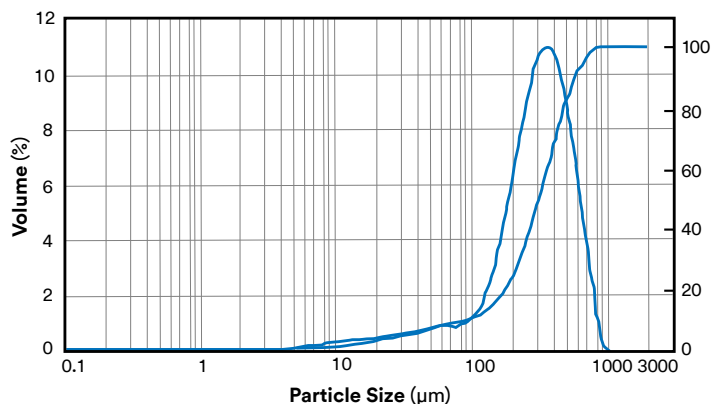
3M Boron Nitride Cooling Filler Flakes 500-15 7010284476	Minimum	Maximum
Particle Size Distribution d(0.1) (µm)	20	150
Particle Size Distribution d(0.5) (µm)	160	400
(Untapped) bulk density (DIN) (g/cm ³)	0.5	0.7
Specific Surface Area (m ² /g)	1	3

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



Refer to the [3M Boron Nitride Cooling Filler Safety Data Sheet](#) for safety information.

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