

3M Advanced Materials Division

3M™ Boron Nitride Cooling Filler Agglomerates 100

Introduction

- Soft bulk agglomerates of crystalline BN platelets with mean particle size 50-80 μm
- Excellent for potting resins and conformable TIM foils or pads with thin bond line 150-200 μm.

Typical Applications (non-limiting):

- Higher through-plane conductivities in TIM parts

Compatible Matrix Materials (non-limiting):

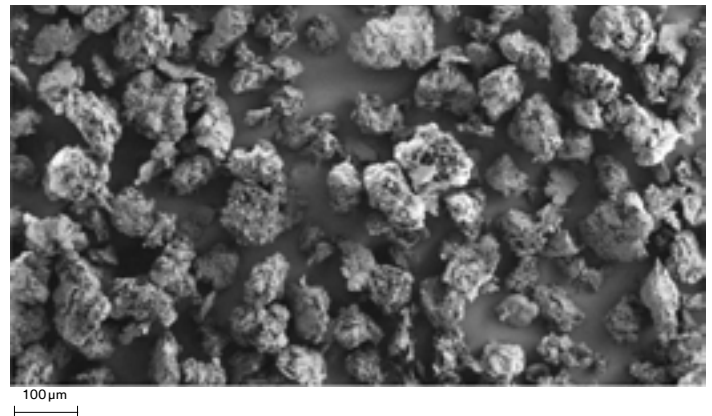
- Elastomers
- Thermosets

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)

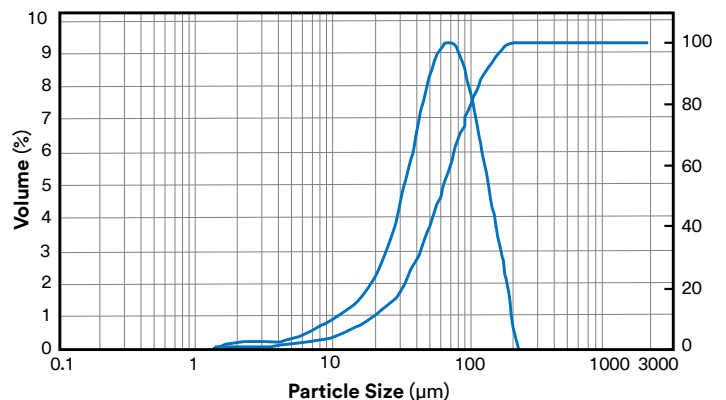
3M Boron Nitride Cooling Filler Agglomerates 100 7010274421	Minimum	Maximum
Particle Size Distribution d(0.1) (μm)	10	35
Particle Size Distribution d(0.5) (μm)	50	80
Particle Size Distribution d(0.9) (μm)	95	145
(Untapped) bulk density (DIN) (g/cm ³)	0.25	0.40
Specific Surface Area (m ² /g)	n.a.	3

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



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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