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3M Advanced Materials Division

3M™ Boron Nitride Cooling Filler

Agglomerates 250S

Introduction

- Spherical (S) platelets spray-dried with inorganic binder and mean granulate size 130 µm
- Granulates for high flowability and dosing velocities during feeding
- "Soft" agglomerates adapt to the flexibility of the polymer matrix
- To prevent degrading, it is recommended to follow processing guide for silicone rubbers

Typical Applications (non-limiting):

- Ideal for TIM pads

Compatible Matrix Materials (non-limiting):

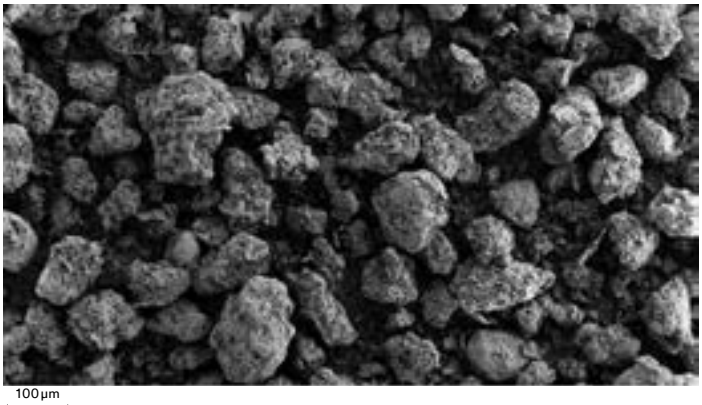
- Thermosets (preferentially Epoxy)
- Elastomers (preferentially Silicone)

Typical Physical Properties

(Not for specification purposes)

O	≤10.0%
C	<0.2%
B_2O_3	<0.1%
BN	≥80.0%

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



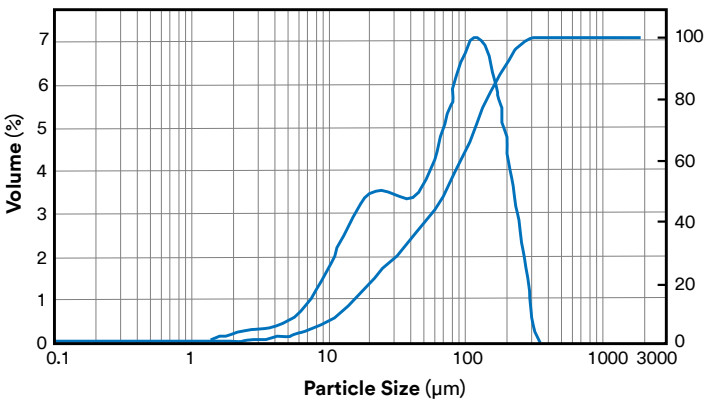
Characteristics

(Not for specification purposes)

3M Boron Nitride Cooling Filler Agglomerates 250S 7010241766	Minimum	Maximum
Particle Size Distribution d(0.1) (µm)	8	20
Particle Size Distribution d(0.5) (µm)	40	100
Particle Size Distribution d(0.9) (µm)	120	210
(Untapped) bulk density (DIN) (g/cm³)	0.3	0.6
Specific Surface Area (m²/g)	2.5	4.5

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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3M Advanced Materials Division

3M Center
St. Paul, MN 55144 USA

Phone 1-800-367-8905
Web www.3M.com/thermalmanagement

3M Technical Ceramics

Zweigniederlassung der 3M Deutschland GmbH
Max-Schaidhauf-Str. 25, 87437 Kempten, Germany

Phone +49 (0)831 5618-0
Web www.3M.de/bncf

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