

3M Advanced Materials Division

3M™ Boron Nitride Cooling Filler Agglomerates 150

Introduction

- Soft bulk agglomerates of crystalline BN platelets with mean particle size 120-200 µm
- Excellent for potting resins and conformable TIM foils or pads with thin bond line above 200 µm

Typical Applications (non-limiting):

- Higher through-plane conductivities in TIM parts

Compatible Matrix Materials (non-limiting):

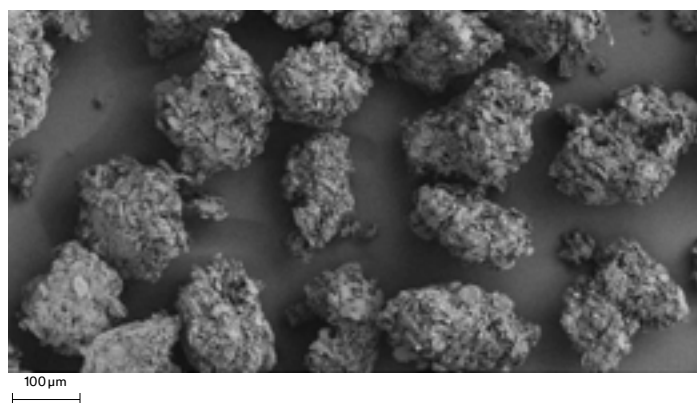
- Elastomers
- Thermosets

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)

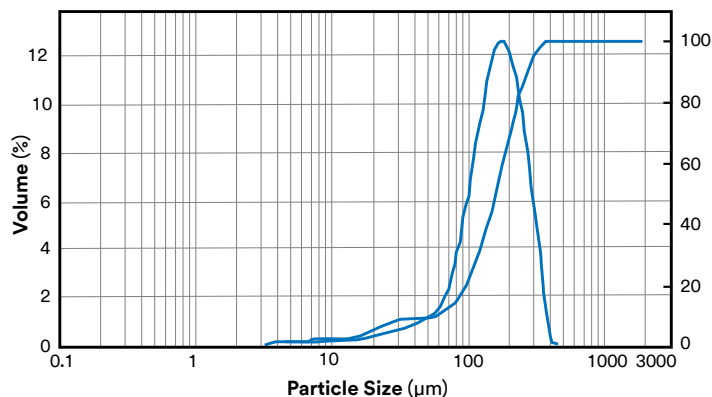
3M Boron Nitride Cooling Filler Agglomerates 150 7010253627	Minimum	Maximum
Particle Size Distribution d(0.1) (µm)	20	80
Particle Size Distribution d(0.5) (µm)	120	200
Particle Size Distribution d(0.9) (µm)	240	360
(Untapped) bulk density (DIN) (g/cm ³)	0.30	0.55
Specific Surface Area (m ² /g)	n.a.	3

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



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

Warranty, Limited Remedy, and Disclaimer: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. User is solely responsible for evaluating third party intellectual property rights and for ensuring that user's use of 3M product does not violate any third party intellectual property rights. Unless a different warranty is specifically stated in the applicable product literature or packaging insert, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OF NON-INFRINGEMENT OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damages arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

Technical Information: Technical information, recommendations, and other statements contained in this document or provided by 3M personnel are based on tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. Such information is intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.



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/bnctf

3M is a trademark of 3M Company. Used under license by 3M subsidiaries and affiliates.

© 3M 2023. All rights reserved.

Issued: 09/23 17624HB