



Roofing Granule

Data Sheet

#11 Grade

Wausau

3M #11 Grade Roofing Granules are ceramic-coated minerals used as surfacing material in asphalt roofing products. These granules are colored with durable pigments, bonded in a ceramic matrix and treated to promote adhesion to asphalt.

Grade: (ASTM D451)

<u>U.S. Sieve No.</u>	<u>Nominal Opening</u>	<u>% Retained Specification</u>		<u>Typical</u>
		<u>Minimum</u>	<u>Maximum</u>	
8	2.36 mm	0.0	0.1	-
12	1.70 mm	4.0	10.0	-
16	1.18 mm	-	-	30-50*
20	850 μ m	-	-	20-40*
30	600 μ m	-	-	10-30*
40	425 μ m	-	-	1-10*
-40	-425 μ m	0.0	2.0	-

*Typical range; not covered

Dust: 0.2% Maximum <100 Mesh US Sieve (150 μ m) (3M TM045)

Deoiled Color: Shipments will be \pm 1.0 unit to standard for L*a*b* (3M TM007)

Moisture Content: 0.3% Maximum (3M TM057)

Color Durability: Has been proven by long-term field performance and accelerated weathering tests

Opacity: 3M Roofing Granules are opaque to protect the asphalt substrate from the effects of sunlight

Hardness: 6.0-7.0 Moh's Mineral Scale

Bulk Density: 94-100 lbs./ft.³ Packed (3M TM058)

Specific Gravity: 2.60-2.75 (3M TM001)

Colors: Various shades of Black, Blue, Brown, Buff, Green, Grey, Olive, Red, White

Availability: 3M Industrial Mineral Products Division
Wausau, Wisconsin 715-845-7241, Fax 715-845-0271

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