



2022

Product Data Sheet
Plant: Mt. Athos

I. GEOLOGICAL FORMATION: GREENSTONE

II. CHEMICAL ANALYSIS (3/2022) :

Silica	as SiO ₂	47.1%	Calcium	as CaO	8.1%
Iron	as Fe ₂ O ₃	14.6%	Magnesium	as MgO	7.0%
Aluminum	as Al ₂ O ₃	13.1%	Sulphur	as S	<.05%

III. QUALITY DATA:			Product						
TEST	TEST DATE		3	57	78	8	9	A SAND	
* SPECIFIC GRAVITY *									
BULK (ASPHALT)	2/22		3.005	3.007	3.006	2.997	3.001	3.001	
BULK - SSD (CONCRETE)	2/22		3.020	3.021	3.026	3.022	3.021	3.019	
APPARENT	2/22		3.050	3.049	3.067	3.074	3.061	3.057	
% ABSORPTION	2/22		0.5%	0.5%	0.7%	0.5%	0.7%	0.6%	
* DRY RODDED (LBS/CUBIC FT)									
DRY RODDED (LBS/CUBIC FT)	2/22		103.3	106.5	104.4	104.5	98.8	112.8	
DRY RODDED (LBS/CUBIC YARD)	2/22		2789	2876	2819	2822	2668	3046	
DRY RODDED (% VOIDS)	2/22		44.9%	43.2%	44.3%	44.1%	47.3%	39.8%	
DRY RODDED (Kg/Cubic Meter)	2/22		1655	1706	1672	1674	1583	1807	
VTM-5 % VOIDS IN STONE SAND	2/22								
ASTM C1252 % VOIDS (METH B)	2/22								
ASTM C1252 % VOIDS (METH C)	2/22								
ASTM D4791 % F & E (3:1)	2/22		39.3%	29.6%	27.7%	32.8%			
* LOS ANGELES DEGRADATION *									
GRADING A % LOSS	2/22	20.3%							
GRADING B % LOSS	2/22	18.5%							
GRADING C % LOSS	2/22	20.7%							
SOUNDNESS % LOSS (Magnesium Sulfate)	2/22		0.2%	0.4%	0.5%	0.5%	8.6%	5.0%	
SOUNDNESS % LOSS (Sodium Sulfate)									
Surface Treatment Rate of Application									
Stone (lb/sq yd)									
Emulsion (gal/sq yd)									
* SUPERPAVE *									
ASTM C1252 % VOIDS (METH A)	2/22								
AASHTO T 176 SAND EQUIVALENT	2/22						91		
ASTM D4791 % F & E (5:1)	2/22		17.2%	7.3%	8.8%	6.8%			

**VIRGINIA DEPARTMENT OF TRANSPORTATION
MATERIALS DIVISION
REPORT ON THEORETICAL MAXIMUM DENSITY AND OPTIMUM MOISTURE CONTENT
(VTM-1)**

Report Date:	3/16/2022 3:13 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Mt. Athos
Job Mix ID:	3030-2018-01	Max. Dry Density (-No.4 portion):	141.7
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	7.6 %
Size Aggregate:	21A	Bulk Specific Gravity:	3.040
Absorption::	0.3 %	Average percent of +No.4 material:	57.4 %
		Number of Samples Referenced:	4

Corrected Maximum Dry Density (lbs/ft³)	165.8
Corrected Optimum Moisture Content (%)	4.0

NOTE: This report has been generated by the Materials Information Tracking System (MITS) /
Producer Lab Analysis and Information Details (PLAID).

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MATERIALS DIVISION
REPORT ON THEORETICAL MAXIMUM DENSITY AND OPTIMUM MOISTURE CONTENT
(VTM-1)**

Report Date:	3/16/2022 3:14 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Mt. Athos
Job Mix ID:	3030-2015-03	Max. Dry Density (-No.4 portion):	141.7
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	7.6 %
Size Aggregate:	21B	Bulk Specific Gravity:	3.040
Absorption::	0.3 %	Average percent of +No.4 material:	54.6 %
		Number of Samples Referenced:	3

Corrected Maximum Dry Density (lbs/ft³)	164.4
Corrected Optimum Moisture Content (%)	4.2

NOTE: This report has been generated by the Materials Information Tracking System (MITS) /
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