



2022

Product Data Sheet
Plant: Lawyers Road

I. GEOLOGICAL FORMATION: ARCH MARBLE

II. CHEMICAL ANALYSIS (3/2022) :

Silica	as SiO ₂	21.8%	Calcium	as CaO	35.4%	CaCO ₃	53.0%
Iron	as Fe ₂ O ₃	2.7%	Magnesium	as MgO	3.0%	MgCO ₃	8.0%
Aluminum	as Al ₂ O ₃	7.0%	Calcium Carbonate Equiv.	CCE			61.0%
Sulfur	as S	0.2%					

III. QUALITY DATA:			Product									
TEST	TEST DATE		3	357	57	W 57	68	78	8/8P	9	Sand	10
* SPECIFIC GRAVITY *												
BULK (ASPHALT)	1/22		2.731	2.717	2.710	2.707	2.702	2.712	2.720	2.691	2.694	2.696
BULK - SSD (CONCRETE)	1/22		2.739	2.723	2.719	2.717	2.715	2.724	2.735	2.710	2.714	2.715
APPARENT	1/22		2.752	2.735	2.735	2.735	2.737	2.747	2.761	2.742	2.751	2.749
% ABSORPTION	1/22		0.3%	0.3%	0.3%	0.4%	0.5%	0.5%	0.6%	0.7%	0.8%	0.7%
DRY RODDED (LBS/CUBIC FT)												
DRY RODDED (LBS/CUBIC FT)	1/22		92.2	93.3	100.4	98.1	99.7	95.9	93.9	94.8	106.7	114.0
DRY RODDED (LBS/CUBIC YARD)	1/22		2489	2519	2711	2649	2692	2589	2535	2560	2881	3078
DRY RODDED (% VOIDS)	1/22		45.9%	45.0%	40.6%	41.9%	40.8%	43.4%	44.7%	43.3%	36.5%	32.2%
DRY RODDED (Kg/Cubic Meter)	1/22		1477	1495	1608	1571	1597	1536	1504	1519	1709	1826
VTM-5 % VOIDS IN STONE SAND	1/22										45.3%	44.0%
ASTM C1252 % VOIDS (METH B)	1/22										52.6%	54.0%
ASTM C1252 % VOIDS (METH C)	1/22										44.4%	44.6%
ASTM D4791 % F & E (3:1)	1/22			36.6%	19.7%	15.6%	18.7%	19.3%	24.5%			
GRADING												
GRADING A % LOSS	1/22	24.8%										
GRADING B % LOSS	1/22	23.4%										
GRADING C % LOSS	1/22	23.9%										
SOUNDNESS % LOSS (Magnesium Sulfate)	1/22		1.0%	0.7%	0.6%	0.5%	0.5%	0.4%	0.4%	9.8%	8.2%	7.0%
SOUNDNESS % LOSS (Sodium Sulfate)												
Stone (lb/sq yd)												
Stone (lb/sq yd)												
Emulsion (gal/sq yd)												
Emulsion (gal/sq yd)												
* SUPERPAVE *												
ASTM C1252 % VOIDS (METH A)	1/22										48.9%	49.8%
AASHTO T 176 SAND EQUIVALENT	1/22										92	69
ASTM D4791 % F & E (5:1)	1/22			5.6%	3.8%	2.2%	3.0%	2.0%	2.6%			
ASTM D5821 % FRACTURE FACES	1/22		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

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

Report Date:	3/16/2022 3:09 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Lawyer's Road
Job Mix ID:	3003-2014-01	Max. Dry Density (-No.4 portion):	132.8
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	7.3 %
Size Aggregate:	21A	Bulk Specific Gravity:	2.720
Absorption::	0.4 %	Average percent of +No.4 material:	56.7 %
		Number of Samples Referenced:	4

Corrected Maximum Dry Density (lbs/ft³)	151.5
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).

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

Report Date:	3/16/2022 3:11 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Lawyer's Road
Job Mix ID:	3003-2014-02	Max. Dry Density (-No.4 portion):	132.8
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	7.3 %
Size Aggregate:	21B	Bulk Specific Gravity:	2.720
Absorption::	0.4 %	Average percent of +No.4 material:	65.3 %
		Number of Samples Referenced:	4

Corrected Maximum Dry Density (lbs/ft³)	154.8
Corrected Optimum Moisture Content (%)	3.4

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