

I. GEOLOGICAL FORMATION: ARVONIA SLATE
 II. CHEMICAL ANALYSIS (3/2022) :

Silica	as SiO ₂	61.4%	Calcium	as CaO	1.5%
Iron	as Fe ₂ O ₃	7.5%	Magnesium	as MgO	2.8%
Aluminum	as Al ₂ O ₃	17.4%	Sulphur	as S	<0.02%

III. QUALITY DATA:			Product								
TEST	TEST DATE		2	357	5L	VDOT 57	57L	VDOT 8	8L	9	A SAND
* SPECIFIC GRAVITY *											
BULK (ASPHALT)	2/22		2.771	2.768	2.784	2.774	2.772	2.772	2.765	2.724	2.712
BULK - SSD (CONCRETE)	2/22		2.779	2.783	2.795	2.787	2.784	2.789	2.784	2.761	2.737
APPARENT	2/22		2.793	2.810	2.815	2.812	2.806	2.820	2.819	2.830	2.782
% ABSORPTION	2/22		0.3%	0.5%	0.4%	0.5%	0.5%	0.6%	0.7%	1.4%	0.9%
* UNIT WEIGHT *											
DRY RODDED (LBS/CUBIC FT)	2/22		91.6	98.1	94.0	92.3	92.5	92.7	88.6	91.4	101.4
DRY RODDED (LBS/CUBIC YARD)	2/22		2473.2	2648.7	2538.0	2492.1	2497.5	2502.9	2392.2	2467.8	2737.8
DRY RODDED (% VOIDS)	2/22		47.0%	43.2%	45.9%	46.7%	46.5%	46.4%	48.7%	46.2%	40.1%
DRY RODDED (Kg/Cubic Meter)	2/22		1467	1571	1506	1478	1482	1485	1419	1464	1624
VTM-5 % VOIDS IN STONE SAND	2/22										56.1%
ASTM C1252 % VOIDS (METH B)	2/22										54.6%
ASTM C1252 % VOIDS (METH C)	2/22										48.0%
ASTM D4791 % F & E (3:1)	2/22					44.0%		48.1%			
* LOS ANGELES DEGRADATION *											
GRADING A % LOSS	2/22	19.6%									
GRADING B % LOSS	2/22	20.6%									
GRADING C % LOSS	2/22	16.8%									
SOUNDNESS % LOSS (Magnesium Sulfate)	2/22		0.6%	0.6%	0.7%	0.7%	0.7%	0.9%	0.9%	6.2%	6.0%
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										50.1%
AASHTO T 176 SAND EQUIVALENT	2/22										92
ASTM D4791 % F & E (5:1)	2/22					17.2%		18.8%			

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

Report Date:	3/16/2022 3:05 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Arvonnia
Job Mix ID:	3032-2019-01	Max. Dry Density (-No.4 portion):	131.6
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	9.1 %
Size Aggregate:	21A	Bulk Specific Gravity:	2.780
Absorption::	0.6 %	Average percent of +No.4 material:	60.2 %
		Number of Samples Referenced:	2

Corrected Maximum Dry Density (lbs/ft³)	154.0
Corrected Optimum Moisture Content (%)	4.6

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 3:08 PM	Production Year:	2022
Producer Name:	Boxley Materials Company	Plant Name:	Arvonía
Job Mix ID:	3032-2019-03	Max. Dry Density (-No.4 portion):	131.6
Type Mix:	Aggregate Base Material-Type I	Optimum Moisture Content (-No.4 portion):	9.1 %
Size Aggregate:	21B	Bulk Specific Gravity:	2.780
Absorption::	0.6 %	Average percent of +No.4 material:	59.4 %
		Number of Samples Referenced:	4

Corrected Maximum Dry Density (lbs/ft³)	153.6
Corrected Optimum Moisture Content (%)	4.6

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