MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

Office of Materials Technology
Aggregate Bulletin
Test Data

Soils and Aggregate Technology Division
7450 Traffic Drive
Hanover, Maryland 21076

Aggregate Bulletin Contacts

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443-572-5162 or IHaider2@mdot.maryland.gov
Amanuel Welderufael, Assistant Division Chief - Lab
443-572-5276 or AWelderufael@mdot.maryland.gov
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http://www.roads.maryland.gov/OMT/AggBlt.pdf

Toll Free: 866-926-8501

Maryland State Highway Administration

Aggregate Bulletin

1. Introduction

This bulletin contains the qualified list of aggregate producers with the physical test data. The bulletin will be updated on a quarterly basis. The last day of January, April, July and October of each year will be the publishing date. Published bulletin data will be valid for one year. For instance, if a test is required to be performed each year, for test data published in the 1st quarter, new test data will be due by the beginning of the 1st quarter of the next year. We encourage producers to keep track of their records, including due dates and submit their requests for aggregate testing on time. Producers are responsible for informing the Soils and Aggregate Technology Division (SATD) of any changes to producer information, such as producer name, quarry name, subsidiary producer's name, contact information, qualified use of aggregate.

The data listed in the aggregate bulletin are considered to be representative of material supplied by a particular source of aggregate. The materials contained within this document are not meant to represent all aggregate materials a particular quarry can produce or supply. It is emphasized that the listed data must not be interpreted in absolute terms. The information is provided as a guide for the expected quality of the material furnished by a listed source.

2. Process for Listing as a Qualified Aggregate Source in MDOT SHA Aggregate Bulletin

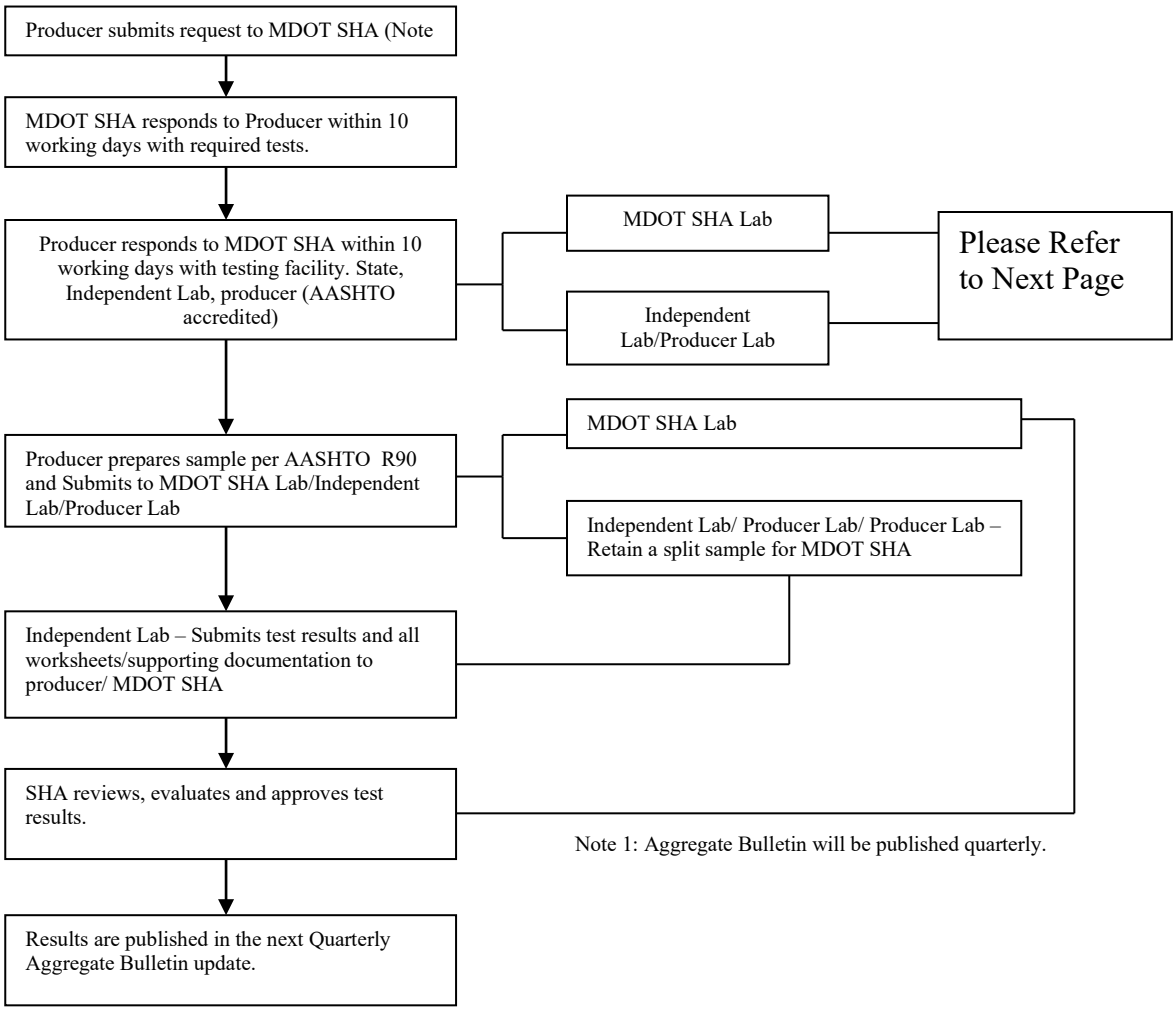
I. Written Request

The aggregate producer shall submit a written request to:

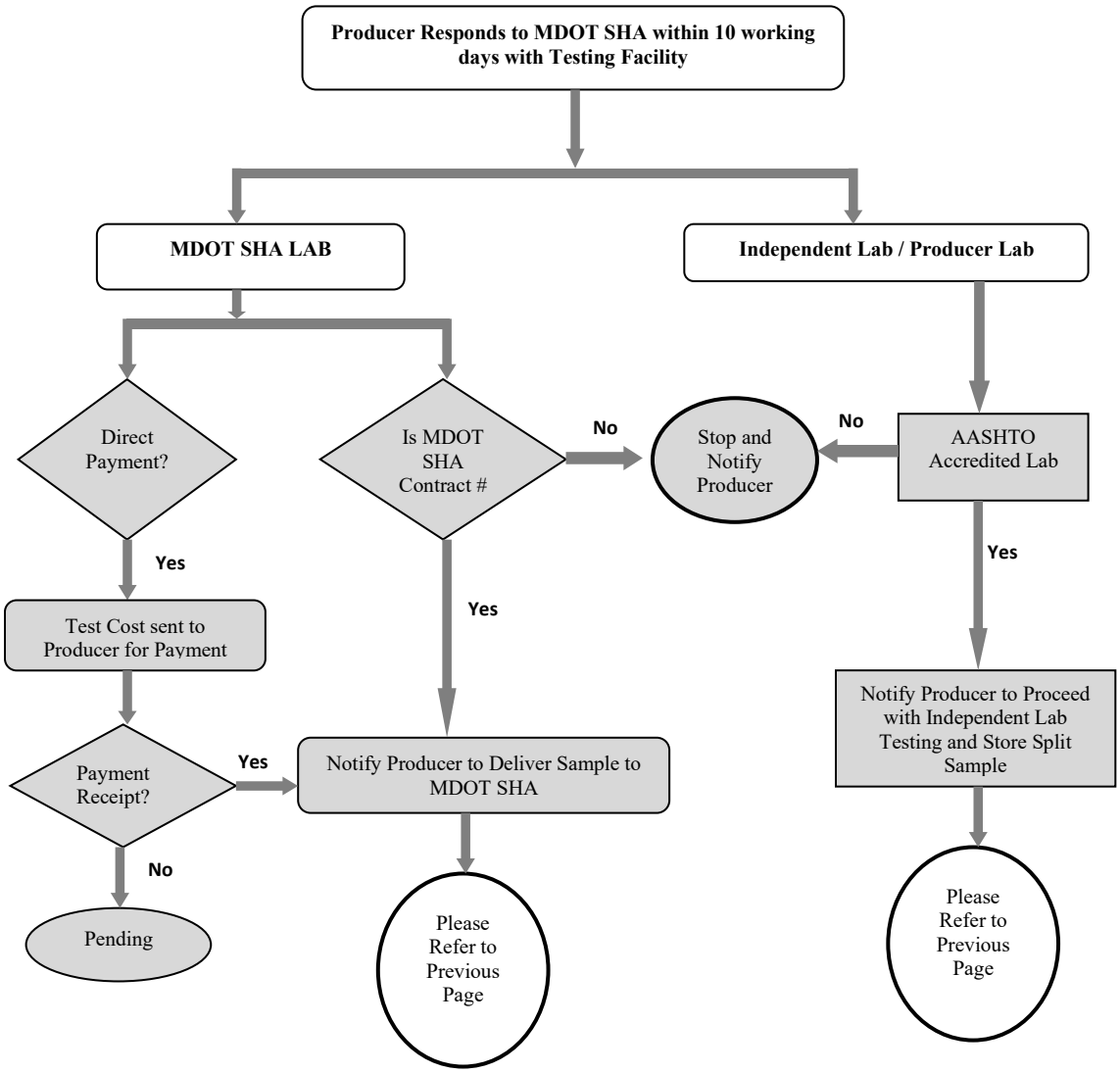
Dr. Intikhab Haider, Division Chief
Soils and Aggregate Technology
Maryland State Highway Administration
7450 Traffic Drive
Hanover, MD 21076
IHaider2@mdot.maryland.gov

A. The SATD requires the producers to submit their written requests before the quarterly aggregate bulletin update. Please refer to the flow chart in Section II for "MDOT SHA Annual Quality Testing Process." If samples are tested at MDOT SHA lab, we are requesting the producers to deliver aggregate samples to the MDOT SHA laboratory 45 days prior to the next publishing date of the aggregate bulletin in order to publish the test data on time.
B. Please refer to Appendix A for "Aggregate Quality Test Request" Form. Producers shall complete and submit this form for each material (i.e. No. 57, Concrete Sand, Mortar Sand, etc.) for each quarry.
C. Safety Data Sheet (SDS): All requests must be accompanied by a Safety Data Sheet with **specific quarry location** with the effective date. No aggregate will be accepted prior to receipt of the SDS.

II. MDOT SHA Annual Quality Testing Process



Note 1: Aggregate Bulletin will be published quarterly.


Producer Responds to MDOT SHA within 10 working days with Testing Facility
MDOT SHA LAB
Independent Lab / Producer Lab
Direct Payment?
Is MDOT SHA Contract #
No
Stop and Notify Producer
No
AASHTO Accredited Lab
Yes
Test Cost sent to Producer for Payment
Yes
Yes
Notify Producer to Proceed with Independent Lab Testing and Store Split Sample
Payment Receipt?
Yes
Notify Producer to Deliver Sample to MDOT SHA
No
Pending
Please Refer to Previous Page
Please Refer to Previous Page

3. Aggregate Tests, Test Frequency and Sample Quantity Requirements

Aggregate Category	Use	Required Tests	Specifications	Test Frequency[1]	Material Quantity/Type
Coarse	General Use (HMA Base, GAB, Backfill, etc.)	Specific Gravity & Absorption	AASHTO T-85	1 year	3 bags of No. 57 (at most 35 lbs. per bag)
		Soundness	AASHTO T-104	3 years	
		Los Angeles Abrasion (LA)	AASHTO T-96	2 years	
	PCC	In addition to tests for **General Use**			
		Alkali-Silica Reaction (ASR)	ASTM C1260	3 years	
	HMA Surface	In addition to tests for **General Use**			
		Dynamic Friction Test	MSMT 215 & 216[2]	2 years	1 bag of 35 lbs. material passing ½" sieve and retained on 3/8" sieve
	High Friction Materials	In addition to tests for **General Use and HMA Surface**			
		Petrography for non-carbonate aggregate	TBD	2 years	As required per Independent Lab
		Acid Insoluble Residue (AIR) for carbonate aggregate	TBD	2 years	
Fine	PCC (Concrete Sand)	Specific Gravity and Absorption	AASHTO T-84	1 year	2 bags (at most 35 lbs. per bag)
		Soundness	AASHTO T-104	3 years	
		Alkali-Silica Reactivity (ASR)	ASTM C1260	3 years	
	Mortar Sand and No. 10 Dust	Specific Gravity and Absorption	AASHTO T-84	1 year	2 bags (at most 35 lbs. per bag)
		Soundness	AASHTO T-104	3 years	
Note: [1] Except for new quarry requesting first time [2] Dynamic friction testing will be performed by MDOT SHA lab only.					

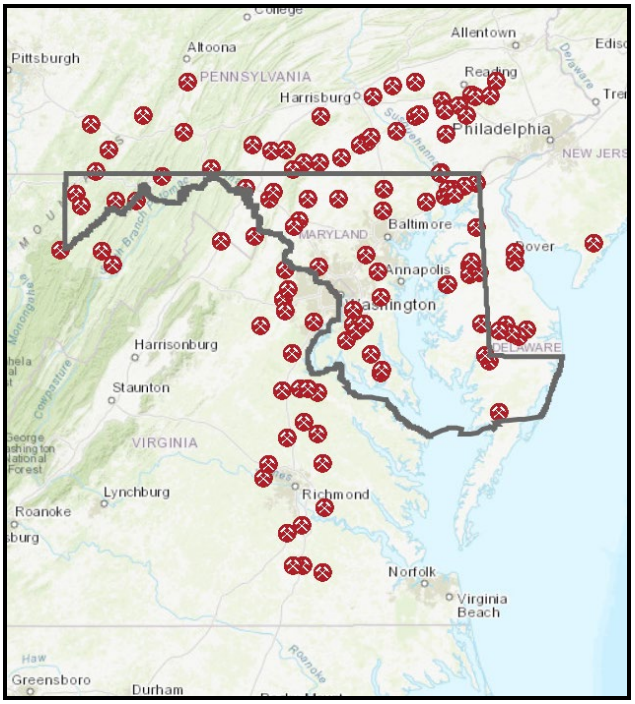
A. Please note that, for quality assurance purposes, SATD has the right to request aggregate tests to be performed more frequently (i.e., Quality Assurance (QA) Testing) than the testing frequency specified above.
B. If aggregate samples are tested at the MDOT SHA laboratory, upon the receipt of payment or confirmation of valid contract charge number, the SATD will send a notice to the producer for sampling. Also, SATD will provide "Aggregate Test for Quality," Form 12, Appendix B, to producers for logging each sample for each quarry. The producers are required to complete this form and submit back to the MDOT SHA lab along with samples at the address mentioned above. The sampling shall be in conformity with AASHTO R90.

C. All information provided by a Producer, Fabricator or Supplier will be kept confidential by SHA and OMT. An exception could occur when the Producer, Fabricator or Supplier makes it publicly available or when agreed upon with SHA and OMT. If the need arises for the release of confidential information by either law or contractual requirements, the Producer, Fabricator or Supplier would be informed of the release of information unless prohibited by law. This confidentiality includes information obtained from sources other than the Producer, Fabricator or Supplier (e.g., complainant, regulators).

D. Samples submitted to SATD, have to labeled properly with the following information.

	Example
• Organization's Name	**Stone Materials**
• Quarry Name	**Hanover Quarry**
• Contract/ Charge No.	**AA123B21**
• Aggregate Size	**#57, #67, GAB, Concrete Sand…etc.**
• Date Sampled	**01/01/2022**
• Test Purpose	**GAB-QA, Aggregate Bulletin…etc.**

Map of Quarry Locations



Appendix A
Aggregate Quality Test Request Form

Office of Materials Technology
Soils and Aggregate Technology Division
Aggregate Quality Test Request Form
Aggregate Producer's Data Sheet
Date Submitted: _____

Organization's Name (Parent Aggregate Producer):
_____

Office / Facility's Name (Subsidiary Aggregate Producer): ***Same as above ____ or***
_____

Supervising Office's Mailing Address:
Street or P.O. Box: _____
Town / City: _____
State: _____ Zip: _____
E-Mail Address: _____
Phone No(s): _____ _____
Fax No.:

Quarry Name's (If Applicable): _____
Street or P.O. Box: _____
Town / City: _____ State: _____ Zip: _____
Entitled Point of Contact: _____
Title / Position: _____
E-Mail Address: _____
Phone No(s): _____ _____
Fax No.: _____

SDS Provided: Yes _____ No_____
Testing Charges: Bill Direct (Yes or No) _____ If No,
MDOT SHA Contract #/Charge #:_____
MDOT SHA Project # (if available):_____
Please provide the following information if applicable:
Testing Facility: MDOT SHA Lab _____ Independent Lab ____If yes, Lab Name_____

Aggregate Category (ies) for Testing: Coarse_____Fine_____Other_____
_____
Aggregate Type (s) for Testing: #57_____Concrete Sand _____Mortar Sand_____
#10 Dust_____Other_____
_____
Aggregate Use(s): HMA Surface____ HMA Base _____PCC_____GAB
_____Other_____General_____

Note: Shaded areas will be published in the Aggregate Bulletin.

Appendix B
Aggregate Test for Quality
(Form 12)

Testing Completed – Reporting Results.

Upon request, the producer will be notified of the preliminary test results once the testing is completed. Subsequently, the test results will be entered into SATD's aggregate database for the next quarterly Aggregate Bulletin update.

S.H.A. 73.0-12
10/10/2018

STATE OF MARYLAND
STATE HIGHWAY ADMINISTRATION
OFFICE OF MATERIALS TECHNOLOGY

AGGREGATE TEST REPORT

Date Sampled _____ Date of Production _____ Date Delivered to LAB _____ Log No. _____

Contract No. _____ Charge No. _____ ☐ MSDS

Type of Construction _____ Item No. _____
(Description of Exact Use of Material)

Type of Material _____ Quantity Represented _____ Size of Sample _____

Type of Sample: ☐ Quality ☐ Job Control ☐ Other _____
(Experimental, Resample, Re-Stock, Etc.)

Produced By _____
(Full Name and Address)

Source of Supply _____
(Full Name and Address)

Sample Taken From _____ ☐ Source ☐ Source of Supply ☐ Job Site

Sample By (Full Name) _____ Witnessed By _____
Federal, County, Municipal Representative's Name

Remarks _____

TEST RESULTS

☐ Gradation:

	3 ½	3	2 ½	2	1 ¾	1 ½	1 ¼	1	¾	5/8	½	3/8	#4	#8
Prod. ☐ Field ☐														
Lab.														

	5/8	½	3/8	#4	#8	#10	#16	#20	#30	#40	#50	#80	#100	#200
Prod. ☐ Field ☐														
Lab.														

Test:

☐ Los Angeles Abrasion, % Loss		☐ Absorption, %		☐ Petro	
☐ Sodium Sulfate, % Loss		☐ Washing over #200, % Loss		☐ Flat and Elongated, %	
☐ Unit Wt. Loose (lbs/ft3)		☐ ASR		☐ Acid Insoluble Residue(AIR),%	
☐ Unit Wt. Rodded (lbs/ft3)		☐ BPN		☐ Color	
☐ Specific Gravity		☐ DFV		☐ Micro Deval, % Loss	
☐ pH		☐ Other		☐ CTM	

The material represented – does____ / does not____ - meet the MDSHA's Standard Specifications for Construction and Materials, Table 901 B, Aggregate Physical Property Requirements.

Remarks: _____

Appendix C - Procedures of Quality Aggregate Testing by Independent Laboratories

Submittal Requirements to Independent Laboratory

The submission package by each producer shall contain the following:

A. Aggregate Quality Test Request Form (Appendix A)

B. Safety Data Sheet (SDS) for each test material per each quarry location

C. Independent laboratory package including name, address, a list of aggregate tests the lab is qualified to perform, experience, AASHTO accreditation and AMRL Proficiency sample ratings for the last two years.

D. The independent lab organization chart and technician's qualification including point of contact for manager, resumes, training records and experience.

The submittal package shall be provided to SATD via mail or electronically to the following address 45 days prior to the Quarterly Aggregate Bulletin update otherwise the SATD does not guarantee the test data to be included to the next published Aggregate Bulletin:

Attn: Dr. Intikhab Haider, Division Chief
Soils and Aggregate Technology
Maryland State Highway Administration
Office of Materials Technology
7450 Traffic Drive
Hanover, MD 21076
IHaider2@mdot.maryland.gov

After reviewing the submittals, we will inform you whether the independent lab is accepted or not. If the lab is accepted, the independent lab shall be valid for one (1) year from the date of the acceptance letter.

Aggregate Tests for Independent Laboratory

The accepted independent lab shall comply with the following aggregate test procedures and specification for aggregate testing.

- AASHTO T11 - Materials Finer Than 75-µm (No. 200) Sieve by Washing
- AASHTO T27 - Sieve Analysis of Fine and Coarse Aggregate

- AASHTO T84 - Specific Gravity (Relative Density) and Absorption of Fine Aggregate
- AASHTO T85 - Specific Gravity (Relative Density) and Absorption of Coarse Aggregate
- AASHTO T96 – Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
- AASHTO T104 - Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate
- AASHTO R76 – Reducing Samples of Aggregate to Testing Size
- AASHTO T255 – Total Evaporable Moisture Content of Aggregate by Drying
- ASTM C 1260 - Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars due to Alkali-Silica Reaction Aggregate or Aggregate/Pozzolan Combinations

A. AASHTO accredited laboratories shall meet R-18 requirements and participate in the AMRL proficiency testing program. In addition, the laboratories should possess or have access to the equipment, facilities, personnel, and calibrated instruments, which are necessary to test material.

B. The producers are encouraged to minimize the number of laboratories used per quarry to minimize errors of precision due to technicians and laboratories to ensure the test quality.

C. The producers shall be submitting the independent lab submittal package to MDOT SHA rather than the independent lab submitting their information directly to us.

Split Samples

The producers shall have a split sample for each quarry before submitting samples to the independent lab.

The SATD will require the split samples as needed to ensure the test quality. The SATD Quality Assurance team may witness and pick the split sample during their normal plant visit. The aggregate producers are required to pay for sampling and reviewing test results in case they do not provide an approved/active contract number and a project charge number.

Test Results Submission by the Independent Laboratory

The independent lab shall submit the final test results along with raw data to the MDOT SHA lab. The raw data sheet shall include the laboratory letterhead with the technician's name, test date, address, contact information, and manager signature. The MDOT SHA will review and verify the test data before publishing in the Aggregate Bulletin.

Aggregate Bulletin

Keys

(-) Under test/under evaluation

(#) In accordance with the Standard Provision Insert (SPI) of Standard Specifications for Construction and Materials, July 2008, Table 901 D, and Aggregate Physical Property Requirements for Asphalt Mixes (Note (e)): when carbonate rock is used, it shall have a minimum of 25 percent insoluble residue retained on the No. 200 sieve. Otherwise, the aggregate source does not qualify for use as a high friction aggregate.

(**) ASR determined in accordance with ASTM C 1293, *Determination of length change of concrete due to Alkali Silica Reaction*.

DFV Dynamic Friction Value is defined as a coefficient of friction multiplied by 100. Accordingly, coarse aggregate is categorized as three broad categories: high, standard, and low DFVs, designated as HDFV, SDFV, and LDFV. These categories are presented below in detail:

HDFV:

- Category I (HDFV I): DFV is equal to 50
- Category II (HDFV II): DFV is equal to 45
- Category III (HDFV III): DFV is equal to 40

SDFV:

- Category IV (SDFV IV): DFV is equal to 30
- Category V (SDFV V): DFV is equal to 25

LDFV:

- Category VI (LDFV VI): DFV is less than 25

Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Allan Myers Materials, Inc. Cedar Hill Quarry Peach Bottom, PA												
	Coarse	#57	2.633	1.1	15	SDFV IV	0.02	0.5	☑	☑	☐	☑
	Fine	#10	2.583	2.1			0.02	3.1	☑	☑	☐	☑
Allan Myers Materials, Inc. Elk Mills Quarry Elk Mills, MD												
	Coarse	#57	2.660	0.4	27	HDFV II	0.06	0.1	☑	☑	☑	☑
	Fine	#10	2.639	0.6				2.0	☑	☑	☐	☐
Allan Myers Materials, Inc. Paradise Quarry Paradise, PA												
	Coarse	#57	2.827	0.4	28	SDFV V	0.05	0.1	☑	☑	☐	☑
Allan Myers Materials, Inc. Talmage Quarry Talmage, PA												
	Coarse	#57	2.826	0.4	20	SDFV V	0.16	0.5	☑	☑	☐	☑
Allegany Aggregates, Inc. Bedrock Quarry Flintstone, MD												
	Coarse	#57	2.721	0.4	21	SDFV V	0.06	1.2	☑	☑	☐	☑
	Fine	#10	2.678	1.6				1.0	☑	☑	☐	☐
Allegany Aggregates, Inc. Short Gap Quarry Keyser, WV												
	Coarse	#67	2.702	0.8	22	SDFV V	0.08	1.3	☑	☑	☐	☑
	Fine	#10	2.658	1.8				3.0	☑	☑	☐	☐
Byler Quarries Fiddler Elbow South Middletown, PA												
	Coarse	#57	2.770	0.3	22		0.01	7.9	☑	☐	☐	☑
	Fine	#10	2.706	0.9				2.4	☑	☑	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

Updated:
April 30, 2024

** ASTM C1293

Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Carmeuse Americas Carmeuse Americas Winchester Operations Clearbrook, VA												
	Coarse	#57	2.723	0.4	20		0.28	2.4	☑	☐	☐	☑
Carolina Stalite Company Gold Hill Gold Hill, NC												
	Coarse	#57	1.565	4.5	30		0.11	0.15	☑	☐	☐	☑
	Fine	Concrete Sand	1.974	6.2			0.10	1.1	☑	☐	☐	☑
Chaney Enterprises, Inc. Bridgetown Henderson, MD												
	Coarse	#57	2.581	1.1	34		0.34	0.03	☑	☐	☐	☐
	Fine	Concrete Sand	2.619	0.8			0.01**	1.1	☑	☑	☐	☑
Chaney Enterprises, Inc. Loveville Quarry Loveville, MD												
	Coarse	# 67	2.577	1.1	35		0.04**	3.2	☑	☐	☐	☑
	Fine	Concrete Sand	2.618	1.0			0.03**	1.4	☑	☑	☐	☑
Chaney Enterprises, Inc. Mechanicsville Quarry Mechanicsville, MD												
	Coarse	#67	2.577	1.1	35		0.05**	0.3	☑	☐	☐	☑
	Fine	Concrete Sand	2.617	0.7			0.02**	0.5	☑	☑	☐	☑
Chaney Enterprises, Inc. Moss Neck Woodford, VA												
	Coarse	# 67	2.665	0.3	36		0.10**	3.9	☑	☐	☐	☑
	Fine	Concrete Sand	2.632	0.9			0.02**	1.3	☑	☑	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

Updated:
April 30, 2024

** ASTM C1293

Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Chaney Enterprises, Inc. Riddle Pit Harwood, MD												
	Coarse	#57	2.621	0.5	40		0.17	0.2	☑	☐	☐	☑
	Fine	Concrete Sand	2.612	0.8			0.02**	1.8	☑	☑	☐	☑
Chaney Enterprises, Inc. Sussex Seaford, DE												
	Fine	Concrete Sand	2.614	0.9			0.02**	2.0	☑	☑	☐	☑
	Fine	Mortar	2.597	0.9				1.3	☑	☐	☐	☐
Chaney Enterprises, Inc. Waldorf Quarry Waldorf, MD												
	Coarse	#67	2.569	1.0	31		0.04**	0.0	☑	☐	☐	☑
	Fine	Concrete Sand	2.624	0.7			0.02**	2.0	☑	☑	☐	☑
Chaney Enterprises, Inc. Winchester Plant Clear Brook, VA												
	Coarse	#57	2.744	0.4	22	LDFV VI	0.08**	3.5	☑	☑	☐	☑
David A. Bramble, Inc. Bridgetown Sand & Gravel Ridgely, MD												
	Fine	HMA Sand	2.614	0.9				2.0	☑	☑	☐	☐
David A. Bramble, Inc. Dudley Pit Wye Mills, MD												
	Fine	HMA Sand	2.614	0.9				1.4	☑	☑	☐	☐
Disney Sand & Gravel, LLC Hebron Quarry Hebron, MD												
	Fine	Concrete Sand	2.622	0.5			0.09	0.8	☑	☐	☐	☑
	Fine	Mortar	2.594	1.0				1.0	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
DunRite Sand & Gravel Vineland NJ Vineland, NJ												
	Fine	Concrete Sand	2.643	0.3			0.11	1.0	☑	☐	☐	☑
Dyer Quarry, Inc. Dyer Quarry Birdsboro, PA												
	Coarse	#57	2.964	0.6	15	HDFV III	0.08	0.4	☑	☑	☑	☑
	Fine	#10	2.847	2.1				3.6	☑	☑	☐	☐
Fairfax Materials Inc. Ours Quarry Petersburg, WV												
	Coarse	#57	2.747	0.3	24		0.08	6.2	☑	☐	☐	☑
Fairfax Materials Inc. Scherr Quarry New Creek, WV												
	Coarse	#67	2.707	0.5	24		0.09	4.6	☑	☐	☐	☑
Fairfax Materials Inc. Thomas Quarry Thomas, WV												
	Fine	Concrete Sand	2.655	0.3			0.23	1.9	☑	☐	☐	☑
George's Creek Stone and Gravel, Inc. Barton Quarry Barton, MD												
	Coarse	#57: Limestone	2.728	1.0	21		0.14	0.5	☑	☐	☐	☑
	Fine	#10: Limestone	2.674	1.8				5.5	☑	☑	☐	☐
Greer Industries, Inc. Buckeye Limestone Company Morgantown, WV												
	Coarse	#57	2.724	0.6	18			0.7	☑	☐	☐	☐
	Fine	#10	2.603	2.0				1.0	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Gudelsky Group Chantilly Crushed Stone Chantilly, VA												
	Coarse	#57	3.050	0.6	15	HDFV II	0.08(-)	0.1	☑	☑	☑	☑
	Fine	#10	2.936	1.8				3.8	☑	☐	☐	☐
Gudelsky Group Gudelsky Materials Brandywine, MD												
	Coarse	#67	2.599	0.8	26		0.25	0.02	☑	☐	☐	☑
	Fine	Concrete Sand	2.613	0.7			0.32	0.5	☑	☐	☐	☐
Haines & Kibblehouse, Inc. Birdsboro Materials Birdsboro, PA												
	Coarse	#57	2.958	0.5	19	HDFV III	0.06	0.1	☑	☑	☑	☑
	Fine	#10	2.924	1.4				4.4	☑	☑	☐	☐
Haines & Kibblehouse, Inc. Douglassville Quarry Douglassville, PA												
	Coarse	#57 Argillite	2.706	0.8	12	HDFV II	0.06	0.7	☑	☑	☑	☑
	Coarse	#57 Diabase	3.174	0.4	16	HDFV II	0.04	0.4	☑	☑	☑	☑
	Fine	#10 Argillite	2.675	1.8				4.1	☑	☑	☐	☐
	Fine	#10 Diabase	3.097	0.8				3.6	☑	☑	☐	☐
Haines & Kibblehouse, Inc. Easton Quarry Easton, PA												
	Coarse	#57	2.775	0.3	15	SDFV IV	0.20	0.2	☑	☑	☐	☑
	Fine	#10	2.708	1.8				0.9	☑	☑	☐	☐
Haines & Kibblehouse, Inc. Penn/MD Materials Peach Bottom, PA												
	Coarse	#57	2.670	0.6	17	SDFV IV	0.02	1.3	☑	☑	☐	☑
	Fine	#10	2.563	2.3				4.0	☑	☑	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Haines & Kibblehouse, Inc. Sanatoga Quarry Pottstown, , PA	Coarse	#7	2.698	0.9	15	HDFV II		5.2	☑	☑	☑	☐
Haines & Kibblehouse, Inc. Silver Hill Quarry Narvon, PA	Coarse	#57	3.028	0.3	21	HDFV II	0.03	0.1	☑	☑	☑	☑
	Fine	#10	2.999	0.6				2.7	☑	☑	☐	☐
Heidelberg Materials Northeast LLC. Newport Sand & Gravel Newport, NJ	Fine	Concrete Sand	2.633	0.5			0.08	1.8	☑	☐	☐	☑
Heidelberg Materials Northeast LLC. Upper Township Mine Woodbine, NJ	Fine	Concrete Sand	2.622	0.5			0.12	1.8	☑	☐	☐	☑
Holcim Accokeek Sand and Gravel - Formerly Aggregate Industries Brandywine, MD	Coarse	#57	2.590	0.7	36		0.00	0.0	☑	☐	☐	☑
	Fine	Concrete Sand	2.617	0.6			0.25	1.3	☑	☑	☐	☑
Holcim Hayfield Sand & Gravel - Formerly Aggregate Industries Fredericksburg, VA	Coarse	#57	2.642	0.5	33		0.34	0.5	☑	☐	☐	☐
	Fine	Concrete Sand	2.597	1.9			0.06	1.5	☑	☐	☐	☑
Holcim Hickory Hill Sand and Gravel - Formerly Aggregate Industries Gloucester, VA	Fine	Concrete Sand	2.641	0.3			0.06	0.9	☑	☑	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Holcim Kirby Road Sand & Gravel - Formerly Aggregate Industries Clinton, MD												
	Coarse	#57	2.584	0.8	35		0.05	0.1	☑	☐	☐	☑
	Fine	Concrete Sand	2.622	0.7			0.20	0.8	☑	☑	☐	☑
Holcim La Plata Sand & Gravel - Formerly Aggregate Industries La Plata , MD												
	Fine	Concrete Sand	2.621	0.7			0.15	1.1	☑	☑	☐	☑
Holcim Mattaponi Sand & Gravel - Formerly Aggregate Industries Aylett, VA												
	Coarse	#57	2.608	0.6	37		0.25	0.6	☑	☐	☐	☑
	Fine	Concrete Sand	2.649	0.4			0.13	0.7	☑	☑	☐	☑
Holcim Millville Quarry - Formerly Aggregate Industries Millville, WV												
	Coarse	#57	2.848	0.3	19	SDFV V	0.05	0.1	☑	☑	☐	☑
	Fine	Concrete Sand	2.832	0.6			0.03	0.3	☑	☑	☐	☑
Holcim New Kent Sand and Gravel New Kent, VA												
	Fine	Concrete Sand	2.643	0.3			0.07	0.7	☑	☐	☐	☑
Holcim Rappahanock Farms Sand & Gravel - Formerly Aggregate Indust. King George, VA												
	Coarse	#57	2.638	0.3	37		0.06	0.0	☑	☐	☐	☑
	Fine	Concrete Sand	2.605	1.3			0.07	1.6	☑	☑	☐	☑
Holcim Rockville Crushed Stone - Formerly Aggregate Industries Rockville, MD												
	Coarse	#57	2.676	1.0	16		0.02	0.7	☑	☐	☐	☑
	Fine	Concrete Sand	2.651	1.7			0.02	0.9	☑	☑	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Holcim Sparrows Point - Formerly Aggregate Industries Yali, Greece												
	Fine	#10	1.736	1.8			0.05	0.0	☑	☐	☐	☑
Keystone Lime Co., Inc. Eichorn Quarry Fort Hill, PA												
	Coarse	#57 - Loyalhanna	2.726	0.5	16	HDFV III	0.35	0.2	☑	☑	☑	☐
Kinsley Materials PenRoc Operations York, PA												
	Coarse	#57	2.789	0.4	27	LDFV VI	0.01	0.6	☑	☑	☐	☑
	Fine	#10	2.722	1.2				2.9	☑	☐	☐	☐
Laurel Sand & Gravel, Inc. Beaver Creek East Quarry Hagerstown, MD												
	Coarse	#57	2.831	0.3	15	SDFV IV	0.07	0.6	☑	☑	☐	☑
	Fine	#10	2.707	2.2				1.3	☑	☑	☐	☐
Laurel Sand & Gravel, Inc. Laurel Hill Quarry Woodsboro, MD												
	Coarse	#57	2.623	0.8	17	HDFV II	0.29	0.8	☑	☑	☑	☑
	Fine	#10	2.618	1.6				1.9	☑	☑	☐	☐
	Fine	Manufactured Sand	2.630	1.4			(-)	2.3	☑	☐	☐	☐
Laurel Sand & Gravel, Inc. S.W. Barrick & Sons Woodsboro Quarry Woodsboro, MD												
	Coarse	#57	2.715	0.2	21	SDFV V	0.01 (-)	2.9	☑	☑	☐	☑
	Fine	#10	2.605	2.6				1.6	☑	☑	☐	☐
	Fine	Manufactured Sand	2.684	0.9			0.13	1.4	☑	☑	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Luck Stone Corporation Bealeton Bealeton, VA												
	Coarse	#57	2.988	0.5	14	HDFV III	0.04	0.3	☑	☑	☑	☑
	Fine	#10	2.854	2.7				4.0	☑	☑	☐	☐
Luck Stone Corporation Boscobel Boscobel, VA												
	Coarse	#57	2.616	0.6	34		0.09	4.5	☑	☐	☐	☑
	Fine	Manufactured Sand	2.598	0.8			0.11	3.8	☑	☐	☐	☑
Luck Stone Corporation Bull Run Chantilly, Virginia												
	Coarse	#57	2.940	0.6	15	HDFV III	0.14	0.6	☑	☑	☑	☑
	Fine	#10	2.826	1.6				2.1	☑	☑	☐	☐
Luck Stone Corporation Caroline Plant Milford, VA												
	Fine	Concrete Sand	2.632	0.5			0.13	1.1	☑	☐	☐	☑
Luck Stone Corporation Culpeper Culpepper, VA												
	Coarse	#57	2.770	0.9	13	SDFV IV	0.02	0.8	☑	☑	☐	☑
Luck Stone Corporation Goose Creek Plant Leesburg (Goose Creek Plant), VA												
	Coarse	#57	2.957	0.5	13	HDFV III	0.06	0.6	☑	☑	☑	☑
	Fine	#10	2.907	1.3				1.7	☑	☑	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Luck Stone Corporation Leesburg Leesburg (Leesburg Quarry), VA												
	Coarse	#57	2.997	0.5	14	HDFV II	0.08	0.2	☑	☑	☑	☑
	Fine	#10	2.962	0.6				3.1	☑	☑	☐	☐
Luck Stone Corporation Spotsylvania - VA Spotsylvania, VA												
	Coarse	#57	2.709	0.3	34	HDFV III	0.07	0.6	☑	☑	☑	☑
	Fine	#10	2.739	0.2				2.8	☑	☑	☐	☐
Martin Marietta Materials Anderson Creek Quarry Rockville, VA												
	Coarse	#57	2.712	0.5	16		0.12	0.4	☑	☐	☐	☑
Martin Marietta Materials Boonsboro Quarry Boonsboro, MD												
	Coarse	#57	2.847	0.2	16	SDFV V	0.00	0.2	☑	☑	☐	☑
	Fine	#10	2.821	0.9				0.4	☑	☑	☐	☐
Martin Marietta Materials Churchville Quarry Bel Air, MD												
	Coarse	#57	3.070	0.2	20	HDFV III	0.02	0.0	☑	☑	☑	☑
	Fine	#10	3.021	0.1				0.9	☑	☑	☐	☐
Martin Marietta Materials Doswell Doswell, VA												
	Coarse	#57	2.735	0.5	18		0.17	0.4	☑	☐	☐	☑
Martin Marietta Materials Frederick Quarry - Frederick (Martin Marietta), MD												
	Coarse	#57	2.712	0.3	24	SDFV IV	0.11	0.1	☑	☑	☐	☑
	Fine	#10	2.663	1.7				1.1	☑	☑	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Martin Marietta Materials Kent Sand & Gravel, LLC Massey, MD												
	Fine	Concrete Sand	2.609	0.6			0.04	2.8	☑	☐	☐	☑
Martin Marietta Materials Medford Quarry New Windsor, MD												
	Coarse	#57 Basalt	2.929	0.5	29	HDFV I	0.04	0.1	☑	☑	☑	☑
	Coarse	#67 Limestone	2.713	0.4	46	SDFV V	0.01	0.1	☑	☑	☐	☑
	Fine	Manufactured Sand Limestone	2.698	0.5			0.03	1.8	☑	☑	☐	☑
Martin Marietta Materials North East Quarry North East, MD												
	Coarse	#57	2.940	0.3	20	HDFV III	0.07	0.1	☑	☑	☑	☑
	Fine	#10	2.724	0.5				3.2	☑	☑	☐	☐
Martin Marietta Materials Pinesburg Quarry Williamsport, MD												
	Coarse	#57	2.810	0.5	16	LDFV VI	0.05	1.9	☑	☑	☐	☑
	Fine	#10	2.737	1.8				1.2	☑	☐	☐	☐
	Fine	Manufactured Sand	2.800	0.7			0.11	0.8	☑	☐	☐	☑
Martin Marietta Materials Texas Quarry Cockeysville, MD												
	Coarse	#57	2.817	0.4	39	SDFV V	0.04	0.8	☑	☑	☐	☑
	Fine	Concrete Sand	2.845	0.3			0.03	5.3	☑	☐	☐	☑
Martin Marietta Materials Warfordsburg Warfordsburg, PA												
	Coarse	#57	2.707	0.6	22	SDFV V		2.5	☑	☑	☐	☐
	Fine	#10	2.624	1.7				3.0	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Martin Stone Quarries Bechtelsville Bechtelsville, PA												
	Coarse	#57	2.820	0.8	15	HDFV III	0.12	0.1	☑	☑	☑	☑
Maryland Minerals, Inc. Sang Run Quarry McHenry, MD												
	Fine	Concrete Sand	2.626	0.6			0.14	3.0	☑	☐	☐	☑
Maryland Minerals, Inc. Thayerville Quarry Oakland, MD												
	Coarse	#67	2.665	0.8	19		0.39	0.4	☑	☐	☐	☐
Melvin L. Joseph Sand and Gravel, Co. Georgetown Quarry Georgetown, DE												
	Fine	Concrete Sand	2.632	0.4			0.23	1.6	☑	☑	☐	☑
	Fine	Mortar Sand	2.612	0.9				2.1	☑	☐	☐	☐
Merrick Sand & Gravel Ingleside Plant Ingleside, MD												
	Fine	Concrete Sand	2.593	1.1			0.02**	1.0	☑	☑	☐	☑
	Fine	Mortar Sand	2.603	1.0				1.5	☑	☐	☐	☐
New Enterprise Stone & Lime Co Inc Ashcom Plant Everett, PA												
	Coarse	#57	2.810	0.3	16	LDFV VI	0.13	0.0	☑	☑	☐	☑
	Fine	#10	2.719	1.7				0.9	☑	☑	☐	☐
New Enterprise Stone & Lime Co Inc Bakersville Plant Somerset, PA												
	Coarse	#57	2.680	0.4	14	HDFV II		1.4	☑	☑	☑	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
New Enterprise Stone & Lime Co Inc Denver Quarry Denver, PA												
	Coarse	#57	2.780	0.2	16	SDFV V	0.17	0.4	☑	☑	☐	☑
	Fine	#10	2.596	1.1				1.1	☑	☑	☐	☐
New Enterprise Stone & Lime Co Inc Hinkletown Quarry Hinkletown, PA												
	Coarse	#57	2.814	0.3	17	LDFV VI	0.02	0.05	☑	☑	☐	☑
	Fine	Concrete Sand	2.799	0.6			0.01	1.2	☑	☐	☐	☑
New Enterprise Stone & Lime Co Inc Honey Brook Quarry Honey Brook, PA												
	Fine	Concrete Sand	2.761	0.7			0.05	1.1	☑	☐	☐	☑
New Enterprise Stone & Lime Co Inc Vintondale Quarry Johnstown, PA												
	Fine	Concrete Sand	2.595	1.1			0.18	2.1	☑	☐	☐	☑
New Enterprise Stone & Lime Co Inc Valley Quarries, Inc. Chambersburg Quarry Chambersburg, PA												
	Coarse	#57	2.711	0.3	17	SDFV V	0.11	0.02	☑	☑	☐	☑
	Fine	#10	2.618	2.0				0.7	☑	☑	☐	☐
New Enterprise Stone & Lime Co Inc Valley Quarries, Inc. Gettysburg Quarry Gettysburg, PA												
	Coarse	#57	2.770	0.7	10	HDFV I	0.28	0.1	☑	☑	☑	☑
	Fine	#10	2.669	3.2				1.6	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
New Enterprise Stone & Lime Co Inc Valley Quarries, Inc. Mt. Cydonia, Plant I Fayetteville, PA												
	Coarse	# 8	2.599	1.0	30	HDFV III		2.0	☑	☑	☑	☐
	Fine	Concrete Sand	2.616	0.8			0.05**	1.7	☑	☑	☐	☑
New Enterprise Stone & Lime Co Inc Valley Quarries, Inc. Roaring Spring Plant Roaring Spring, PA												
	Coarse	#57	2.776	0.4	17	SDFV V	0.10	0.04	☑	☑	☐	☑
	Fine	Concrete Sand	2.670	1.8			0.14	2.0	☑	☐	☐	☑
Norlite, LLC Norlite LLC Cohoes, NY												
	Coarse	#7	1.593	9.9	31		0.03	0.1	☑	☐	☐	☑
	Fine	Concrete Sand	1.918	3.2			0.07	0.7	☑	☐	☐	☑
Northeast Solite Corporation Mount Marion Mine Saugesties, NY												
	Coarse	#57	1.512	9.7	28		0.05 (-)	2.9	☑	☐	☐	☑
	Fine	Concrete Sand	1.946	6.0			0.10	0.4	☑	☐	☐	☑
Patuxent Materials, Inc. Bridgetown Sand and Gravel Ridgely, MD												
	Fine	Concrete Sand	2.596	1.2			0.14	2.1	☑	☐	☐	☑
	Fine	Mortar Sand	2.575	1.5				0.6	☑	☐	☐	☐
Patuxent Materials, Inc. Faulkner Plant Goldsboro, MD												
	Fine	Concrete Sand	2.623	0.5			0.15	1.3	☑	☐	☐	☑
	Fine	Mortar Sand	2.610	1.0				5.6	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Patuxent Materials, Inc. Goldsboro Sand and Gravel/Perry Corner Goldsboro, MD												
	Fine	Concrete Sand	2.611	0.7			0.23	2.0	☑	☐	☐	☑
	Fine	Mortar Sand	2.612	0.7				1.0	☑	☐	☐	☐
Pennsy Supply, Inc. Bay Road Plant Dover , DE												
	Fine	Concrete Sand	2.614	0.8			0.09	2.1	☑	☐	☐	☑
Pennsy Supply, Inc. East Petersburg/East Hempfield TWP Manheim, PA												
	Coarse	#57	2.783	0.4	18	SDFV IV	0.04	0.1	☑	☑	☐	☑
	Fine	#10	2.753	1.2				1.2	☑	☑	☐	☐
Pennsy Supply, Inc. Landisville/ West Hempfield TWP Mount Joy, PA												
	Coarse	#57	2.830	0.2	18	SDFV IV	0.08	0.2	☑	☑	☐	☑
	Fine	#10	2.800	0.6				3.4	☑	☑	☐	☑
Pennsy Supply, Inc. Millard Quarry Annville, PA												
	Coarse	#57	2.847	0.3	17	LDFV VI	0.03	0.0	☑	☑	☐	☑
	Fine	#10	2.795	0.6				1.8	☑	☑	☐	☐
Pennsy Supply, Inc. Mt. Holley / Dickinson Township Mount Holly Springs, PA												
	Coarse	#8	2.618	1.1	32	HDFV II		0.2	☑	☑	☑	☐
	Fine	Concrete Sand	2.579	2.0			0.04**	0.7	☑	☐	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Pennsy Supply, Inc. Prescott/South Lebanon Township Lebanon, PA												
	Coarse	#57	2.801	0.5	19	LDFV VI	0.01	0.5	☑	☑	☐	☑
	Fine	#10	2.693	2.2				1.4	☑	☑	☐	☐
Pennsy Supply, Inc. Tarburton Plant Dover, DE												
	Fine	Concrete Sand	2.610	0.9			0.10	0.4	☑	☐	☐	☑
	Fine	Mortar	2.603	0.7				1.3	☑	☐	☐	☐
Rockville Fuel & Feed Marshyhope Operations, LLC Rosser Pit Federalsburg, MD												
	Fine	Concrete Sand	2.623	0.6			0.13	1.7	☑	☑	☐	☑
Rohrer Quarry Lititz - PA Lititz, PA												
	Coarse	#57	2.785	0.2	24		0.16	0.0	☑	☐	☐	☑
	Fine	#10	2.747	0.5				2.6	☑	☑	☐	☐
Savage Stone, LLC Savage Quarry Jessup, MD												
	Coarse	#57	2.942	0.8	22	HDFV III	0.03	8.6	☑	☑	☑	☑
	Fine	# 10	2.874	1.2				4.5	☑	☑	☐	☐
Shelly Materials, Inc. Reedsville Reedsville, OH												
	Fine	Concrete Sand	2.621	1.4			0.24	1.2	☑	☐	☐	☑
Silvi Materials Port Norris Port Norris, NJ												
	Fine	Concrete Sand	2.636	0.6			0.15	3.0	☑	☑	☐	☑

Note [1]: Category I (HDFV I): DFV-50 Category II (HDFV II): DFV-45 Category III (HDFV III): DFV-40
Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Sloan Materials, LLC Leonardtown MD Leonardtown, MD												
	Fine	Concrete Sand	2.613	0.8			0.25	2.4	☑	☑	☐	☑
Specialty Granules Charmian Plant Blue Ridge Summit, PA												
	Coarse	#57 Mixed Metabasalt	2.956	0.4	18	HDFV I	0.37	0.4	☑	☑	☑	☐
	Fine	#10 Mixed Metabasalt	2.886	1.9				2.0	☑	☑	☐	☐
St. Thomas Development, Inc. St. Thomas Development St. Thomas, PA												
	Coarse	#57	2.706	0.3	24	LDFV VI	0.13	0.4	☑	☑	☐	☑
	Fine	#10	2.634	1.7				1.9	☑	☑	☐	☐
The Naceville Group Naceville Quarry Sellersville, PA												
	Coarse	#57	2.758	0.5	12		0.16	1.3	☑	☑	☐	☑
	Fine	#10	2.684	1.9				6.3	☑	☑	☐	☐
The Naceville Group Plumstead Quarry Doylestown, pa												
	Coarse	#57	2.722	0.6	14	HDFV III	0.15	0.2	☑	☑	☑	☑
	Fine	#10	2.701	2.3				1.0	☑	☑	☐	☐
Titan Mid-Atlantic Aggregates Branchville Sand Plant Branchville, VA												
	Fine	Concrete Sand	2.619	0.6			0.16	1.2	☑	☐	☐	☑

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Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD)	ABS (%)	LA (%)	Friction Rating [1]	ASR (%)	Soundness (%)	Material Tested For			
			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
Titan Mid-Atlantic Aggregates Waverly Sand Plant Waverly, VA	Fine	Concrete Sand	2.613	0.9			0.12	0.7	☑	☐	☐	☑
Tuckahoe Sand & Gravel Tuckahoe NJ Tuckahoe, NJ	Fine	Concrete Sand	2.632	0.6			0.15	0.3	☑	☐	☐	☑
U.S. Silica Company U.S Silica Quarry Berkeley Springs, WV	Coarse	#57 Limestone	2.702	0.5	41	SDFV IV	0.22	0.7	☑	☑	☐	☑
Vulcan Materials Company, Inc. Frederick Plant Frederick (Vulcan), MD	Coarse	#57	2.756	0.4	22	SDFV IV	0.14	2.0	☑	☑	☐	☑
	Fine	Concrete Sand	2.612	0.9			0.16	5.6	☑	☑	☐	☑
Vulcan Materials Company, Inc. Graham Quarry Lorton, VA	Coarse	#57	2.700	0.3	33	HDFV II	0.02	0.4	☑	☑	☑	☑
	Fine	#10	2.681	0.3				3.1	☑	☐	☐	☐
Vulcan Materials Company, Inc. Hanover Plant Hanover, PA	Coarse	#57	2.797	0.5	22	SDFV V	0.01	1.0	☑	☑	☐	☑
	Fine	Manufactured Sand	2.813	0.3			0.02	1.3	☑	☑	☐	☑
Vulcan Materials Company, Inc. Havre de Grace Quarry Havre de Grace, MD	Coarse	#57	2.830	0.4	15	HDFV III	0.24	0.3	☑	☑	☑	☑
	Fine	#10	2.872	0.6				3.6	☑	☑	☐	☐

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Category IV (SDFV IV): DFV-30 Category V (SDFV V): DFV-25 Category VI (LDFV VI): DFV is less than 25.

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Maryland Department of Transportation - State Highway Administration: Coarse and Fine Aggregate Test Data

Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD) T-84 & 85	ABS (%) T-84 & 85	LA (%) T-96	Friction Rating [1] MSMT 215 & 216	ASR (%) ASTM C1260	Soundness (%) T-104	Material Tested For: General (HMA Base, GAB, Backfill, etc.)	Material Tested For: HMA Surface	Material Tested For: High Friction Materials	Material Tested For: PCC
Vulcan Materials Company, Inc. Jack Quarry Petersburg, VA												
	Coarse	#57	2.658	0.6	22		0.07	0.5	☑	☐	☐	☑
Vulcan Materials Company, Inc. Manassas Quarry Manassas, VA												
	Coarse	#57	2.843	0.8	11	HDFV III	0.03	0.9	☑	☑	☑	☑
	Fine	#10	2.759	2.1				1.7	☑	☑	☐	☐
Vulcan Materials Company, Inc. Puddledock Prince George, VA												
	Fine	Concrete Sand	2.596	0.9			0.05	3.0	☑	☐	☐	☑
Vulcan Materials Company, Inc. Quinton Sand Pit Salem, NJ												
	Fine	Concrete Sand	2.618	0.7			0.18(-)	1.4	☑	☑	☐	☑
	Fine	Mortar Sand	2.639	0.6				0.8	☑	☐	☐	☐
Vulcan Materials Company, Inc. Sanders Quarry Warrenton, VA												
	Coarse	#57	2.955	0.8	10	HDFV I	0.06	0.5	☑	☑	☑	☑
	Fine	#10	2.829	3.1				1.2	☑	☐	☐	☐
Vulcan Materials Company, Inc. Seaford Terminal Seaford, DE												
	Fine	Concrete Sand	2.608	0.9			0.07	2.4	☑	☐	☐	☑
Vulcan Materials Company, Inc. Stafford Quarry Garrisonville, VA												
	Coarse	#57	2.925	0.3	15		0.08	0.6	☑	☐	☐	☑
	Fine	#10	2.800	1.0					☑	☐	☐	☐

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Producer	Aggregate Category	Aggregate Type	Specific Gravity (SSD) T-84 & 85	ABS (%) T-84 & 85	LA (%) T-96	Friction Rating [1] MSMT 215 & 216	ASR (%) ASTM C1260	Soundness (%) T-104	Material Tested For: General (HMA Base, GAB, Backfill, etc.)	Material Tested For: HMA Surface	Material Tested For: High Friction Materials	Material Tested For: PCC
Vulcan Materials Company, Inc. Wolman Sand Seaford , DE												
	Fine	Concrete Sand	2.601	1.1			0.07	2.5	☑	☑	☐	☑
	Fine	Mortar Sand	2.587	1.2				3.1	☑	☐	☐	☐
Vulcan Materials Company, Inc. York Plant York, PA												
	Coarse	#57	2.824	0.4	29	SDFV V	0.01	0.2	☑	☑	☐	☑
	Fine	Manufactured Sand	2.791	0.8			0.01	2.5	☑	☐	☐	☑
Whibco of NJ, Inc Port Elizabeth - Plant #1 Port Elizabeth, NJ												
	Fine	Concrete Sand	2.654	0.2			0.04	1.4	☑	☑	☐	☑
York Building Products Eastern Shore Sand and Gravel, Ingleside Plant Henderson, MD												
	Coarse	#57	2.513	2.4	34			0.0	☑	☐	☐	☐
	Fine	Concrete Sand	2.599	1.2			0.04**	1.7	☑	☑	☐	☑
	Fine	Mortar Sand	2.551	2.4				0.9	☑	☐	☐	☐
York Building Products Lincoln Stone Division Thomasville Quarry Thomasville, PA												
	Coarse	#57	2.780	0.3	18		0.02	0.5	☑	☐	☐	☑
	Fine	#10	2.710	1.7				2.8	☑	☐	☐	☐
York Building Products Principio Quarry Port Deposit, MD												
	Coarse	#57	2.663	0.7	21	HDFV I	0.12	0.1	☑	☑	☑	☑
	Fine	#10	2.650	0.3				4.5	☑	☑	☐	☐

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			T-84 & 85		T-96	MSMT 215 & 216	ASTM C1260	T-104	General (HMA Base, GAB, Backfill, etc.)	HMA Surface	High Friction Materials	PCC
York Building Products Roosevelt Quarry York, PA												
	Coarse	#57	2.795	0.4	30	LDFV VI	0.01	0.2	☑	☑	☐	☑
	Fine	#10	2.804	0.8				1.0	☑	☑	☐	☐
York Building Products Mason-Dixon Materials Belvedere Plant Port Deposit , MD												
	Fine	Concrete Sand	2.612	1.1			0.04	1.2	☑	☑	☐	☑
	Fine	Mortar Sand	2.621	0.9				0.8	☑	☐	☐	☐
York Building Products Mason-Dixon Materials Cecil Plant Port Deposit, MD												
	Fine	Concrete Sand	2.618	0.9			0.02	1.2	☑	☑	☐	☑
York Building Products Mason-Dixon Materials Perryville Plant Perryville, MD												
	Fine	Concrete Sand	2.630	0.6			0.04**	1.5	☑	☑	☐	☑
	Fine	Mortar	2.628	0.6				1.5	☑	☐	☐	☐

Note [1]: Category I (HDFV I): DFV-50; Category II (HDFV II): DFV-45; Category III (HDFV III): DFV-40; Category IV (SDFV IV): DFV-30; Category V (SDFV V): DFV-25; Category VI (LDFV VI): DFV is less than 25.

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