Version: V03.50

Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S6 (PG 76-28 OK) Mat'l. Code: asco016
(Material Full Name and Material Code)

Insoluble ID: I1
(Design Type and Design Type ID)

APAC Central - (Arkhola S & G Asphalt) P/S # m00553
(Producer/Supplier Name and Producer/Supplier Code)

S6qc0061801300
(Mix ID)

APAC - Central (Muskogee, OK) Formerly Glover PLANT ID # m00553-09
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
3/8" Chips	APAC-Central, 46th St (NW pit Tulsa, OK) P/S # m001197201	10
Scrns.	APAC-Central, 46th St (NW pit Tulsa, OK) P/S # m001197201	30
Mine Chat	Mine Chat @ Tri City Area P/S # MineChat	10
Drag Sand	Mine Chat @ Tri City Area P/S # MineChat	38
Sand	APAC - Arkhola Muskogee Sand Plant P/S # m001315103	12

Asphalt Cement: Asphaltic Cement Type PG 76-28 OK, acem001, HollyFrontier (Catoosa, OK), m01028
(Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)

Requires Form 93-E0 signed by the Department for production use.
-Oklahoma D.O.T. Materials-

Producer/Supplier:	APAC-Central, 46th St (NW pit Tulsa, OK) P/S # m001197201	APAC-Central, 46th St (NW pit Tulsa, OK) P/S # m001197201	Mine Chat @ Tri City Area P/S # MineChat	Mine Chat @ Tri City Area P/S # MineChat	APAC - Arkhola Muskogee Sand Plant P/S # m001315103								
Sieve Size	3/8" Chips	Scrns.	Mine Chat	Drag Sand	Sand				Comb. Agg.	JMF	Min.	Max.	% Tol. (±)
3/8 in (9.5 mm)	100	100	100	100	100				100	**100**	100	100	0
#4 (4.75 mm)	34	83	46	97	100				82	**82**	75	89	7
#8 (2.36 mm)	10	60	11	70	96				58	**58**	53	63	5
#16 (1.18 mm)	6	43	4	45	85				41	**41**	37	45	4
#30 (.600 mm)	4	31	2	27	66				28	**28**	24	32	4
#50 (.300 mm)	3	24	2	14	20				15	**15**	11	19	4
#100 (.150 mm)	3	18	1	6	1				8	**8**	5	11	3
#200 (.075 mm)	2.6	14.7	1.0	3.0	0.5				6.0	**6.0**	4.0	8.0	2
AC Content %									6.3	**6.3**	5.9	6.7	0.4

	°F (°C)	Required
Mix temperature @ discharge from mixer:	325 (163)	± 20 °F (± 10 °C)
Optimum roadway compaction temperature:	305 (152)	
Laboratory mixing temperature:	325 (163)	
Laboratory compaction temperature:	300 (149)	

Tests on Asphalt Cement	Found
Specific Gravity @ 77 °F	1.0100

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Tests on Compressed Mixtures (@ Design AC)

	# Gyr.	% Density of Gmm	% Density Required
Nini	8	88.3	85.5 - 89.0
Ndes	80		96.0

Tests on Aggregates		Required		Units
Contabro		N/A		%
Durability Index	68	40	min.	%
F.A.A. %U	45	N/A		%
Flat and Elongated		10	max.	%
Fractured Faces	100/100	98/95	min.	%
Insoluble Residue	52.2	40	min.	%
LA Abrasion	23	40	max.	%
Micro-Deval	14.9	25	max.	%
Permeability	3.5	12.5	max.	10^{-5}cm/s
Sand Equivalent	81	50	min.	%
IOC	0.30			%
Gse	2.632			
Gsb	2.568			
Specimen Weight	4650			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required Design / Field	% VMA	% VMA Required Design / Field	% VFA	% VFA Required
5.8	2.255	2.408	93.6		17.3		63.0	
6.3	2.291	2.390	95.9	96.0 / 94.5 - 97.4	16.4	16.5 / 16.0	75.0	75 - 79
6.8	2.316	2.373	97.6		15.9		84.9	

Dust Prop.	Dust Prop. Req.
1.2	
1.1	0.6 - 1.6
1.0	

ITS (PSI) 117.5 75 min.
TSR 0.81 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 105.1 @ 6.3 % Asphalt Cement

Hamburg Rut Test Depth (mm) 3.25 12.50 max. @ 20,000 cycles

MEETS SPECIFICATION REQUIREMENTS PER SPECIAL PROVISION 708-26(a-f) 09

Comments:

Last Modified By: Smith, Jerry D. jsmith
(User Name and User ID)

Date: 9/28/2018
(mm/dd/yyyy)