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ABOUT US

ATDM Products:

- . Oxidized Bitumen
- . Penetration Bitumen
- . Cutback Bitumen
- . Emolution Bitumen
- Gilsonite

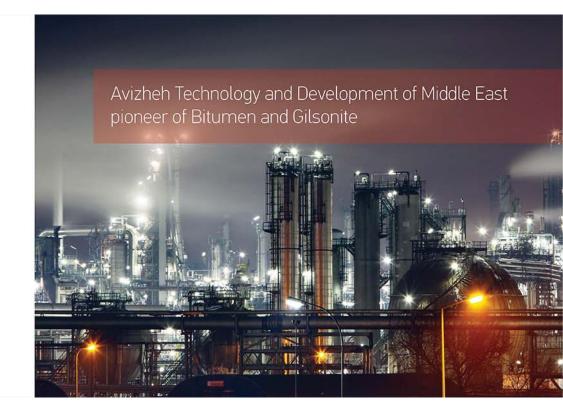
ATDM Company

Avizheh Technology and Development of Middle East Company with experienced management started to work for long term activity to aid development of our country in 2006.

The company's activity is production and sales of Bitumen and Gilsonite. ATDM is honored to be the pinneer of exporters and sale high quality bitumen and Gilsonite with safe, trusted and high speed system of transportation all over the world.

Gilsonite as a unique mineral is used in more than 160 products, primarily in darkcolored printing inks and paints,oil well drilling muds & cements,asphalt modifiers foundry sands additives and a wide variety of chemical products.

High quality Iran – bitumen produced according to ASTM standards and we are using : modern bitumen tankers , bitutainers , flexi tanks , bitubag ... , and storage terminals,





Oxidized bitumen grades are suitable for: Sealing saw cuts and joints where there is expected to be the minimum amount of moving in the joint.

Their wide temperature range prevents bleeding in high temperature applications. Oxidized bitumen can also be used in industrial applications like roofing, flooring, mastics, pipe coatings, electrical applications.

PROPERTY	GRADES												
	R75/25	R85/25	R90/15	R90/40	R95/15	R95/25	R115/15	R125/10	R150/5				
RANGE OF SOFTENING POINT °C, RING AND BALL METHOD	70-80	80-90	85-95	85-95	90-100	90-100	110-120	120-130	145-155				
RANGE OF PENETRATION (100G /5S /25°C), 0.1 MM	20-30	20-30	10-20	35-45	10-20	20-30	10-20	7-12	3-7				
FLASH POINT, MIN °C (COC)	250	250	250	250	250	250	250	250	250				
SOLUBILITY IN CARBON DISULPHIDE, TRICHLORGETHYLENE	99	99	99	99	99	99	99	99	99				
ASH CONTENT, PER CENT BY MASS, MAX	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5				
LOSS ON HEATING FOR B H AT 163°C PER CENT BY MASS, MAX	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				



CUTBACK

 $\label{lem:cutback} \textbf{Cutback} \ \ \text{asphalt} \ \ \text{is simply a combination of asphalt cement and petroleum solvent} \\ \text{and reduce asphalt viscosity for lower temperature uses} \ .$

PROPERTY	Test method	GRADES										
		MC-30		MC	MC-70		MC-250		MC-800		-3000	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
Kinematic Viscosity at 60°C mm2/s	ASTM D2170	60	30	140	70	500	250	1600	800	6000	3000	
Flash Point (Tag Open-Cup), °C	ASTM D3143		38	127	38	-	66		66	-	66	
	Distillate Tes	t : Distil	late, Vol	ume Perc	ent of Tot	al Distill	ate to 36	0°C				
To 225°C	ASTM D402	25	-	20		10	12	-	-	- 2	-	
To 260°C	ASTM D402	70	40	60	20	55	15	35		15	- 5	
To 316°C	ASTM D402	93	75	90	65	87	60	80	45	75	15	
Residue from distillation to 360°C, percent volume by difference	ASTM D402	-	50		55	- 21	67	-	75	- 21	80	
		Tes	ts on Res	sidue from	m Distilla	tion						
Viscosity at 60 °C,	ASTM D2170	120	30	120	30	120	30	120	30	120	30	
Penetration at 25 °C,	ASTM D5	250	120	250	120	250	120	250	120	250	120	
Ductility at 25 °C,	ASTM D113	-	100	-	100		100	-	100	-	100	
Solubility in trichloroethylene, %	ASTM D2042	-	99	- 51	99	0.00	99		99	97	99	
Water, %	ASTM D95	0.2	*	0.2	- 54	0.2		0.2	-	0.2	+1	



PENETRATION BITUMEN

Penetration Grade Bitumen is a standard bitumen usually used as a road construction essential for heavy traffic road and for the production of asphalt pavements with various application, and it's very important once it bounds the aggregates and creates a unique cohesion and stability to the bituminous mix.

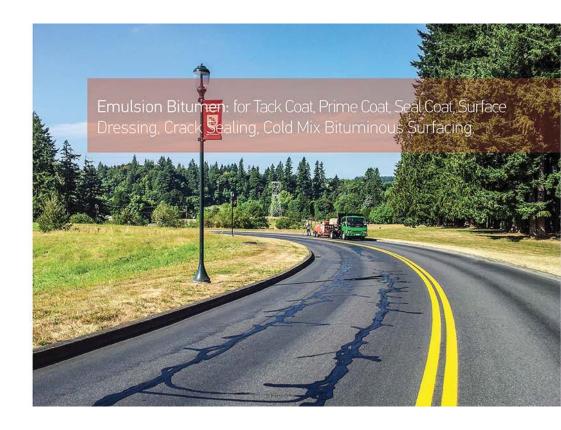
PROPERTY	Unit	Unit Test method	GRADES											
	Unit		250/330	160/220	100/150	85/100	80/100	60/70	50/70	40/60	35/50	30/45	20/30	10/20
Penetration at 25 oC	0.1mm	EN 1426	250-330	160-220	100-150	85-100	80-100	60-70	50-70	40-60	35-50	30-45	20-30	10-2
Softening Point	oC	EN 1427	30-38	35-43	39-47	41-49	42-50	43-51	46-54	48-56	50-58	52-60	55-63	65-7
Change of Mass Maximum	%	D.6	1.0	1.0	0,8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5
Retained Penetration Minimum	%	ASTM D5	35	37	43	-44	45	46	50	50	53	53	55	25
Ductility	%	D.113	100	100	100	100	100	100	100	100	100	100	100	100
Flash Point Minimum	30	EN22592	220	220	230	230	230	230	230	230	240	240	240	250
Solubility Minimum	%(m/m)	EN 12592	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0



EMULSION BITUMEN

Bitumen Emulsion that is categorized in various road construction industries .

	GRADES										
PROPERTY	- CRS1		51	CRS	2	CSS1		CMS2			
	Test On Emulsions										
Property	Testmethod	Max	Min	Max	Min	Max	Min	Max	Min		
Viscosity, Saybolt Furol at 25 °C, SFS	ASTM D244		2	2		100	20	- 1	-		
Viscosity, Saybolt Furol at 25 °C, SFS	ASTMD3143	~	- 2	100	400	2	-	40	450		
Storage stability test, 24 -h, %	ASTMD6930	20	100		1	1	-	-	1		
Demulsibility, 35 mL, 0.8 % diectyl sodium sulfosuccinate, %	ASTMD6936		1	40							
			0	oating abili	ty and wate	r resistanc	6				
Coating, dry aggregate	ASTM D244		1.51	- 5		15		good			
Coating, after spraying	ASTM D244	15	2.60	51	- 22			Fair	100		
Coating, wet aggregate	ASTM D244		7 1	*:			(*	Fair			
Coating, after spraying	ASTM D244	12	163	#.		93	19	Fair	(4)		
Particle charge test	ASTM D244	Pos	itive	Pos	itive	Posi	itive	Positive			
Sieve test, %	ASTMD6933		0.1	-	0.1		0.1	-	0.1		
Cement mixing test, %	ASTMD6935		1.7			77.7	2.0	12.1	-		
			Te	ests on resid	due from di	stillation te	st				
Penetration, 25°C (77°F), 100 g, 5 s	ASTMD5	100	250	100	250	100	250	100	250		
Ductility, 25°C (77°F), 5 cm/min, cm	ASTMD113	40		40		40	-	40			
Solubility in trichloroethylene, %	ASTMD2042	97.5	14.5	97.5	2	97.5	- 2	97.5	12		



Gilsonite is famouse with ATDM brand in the world. It is used as fluid loss controller additives and a performance-enhancing agent for asphalt mixes.

PROPERTY	220000000000000000000000000000000000000	GRADES									
THOI ENT	Test method	Road Paving	Oil Drilling	Pipe Coating	Painting & Ink	Foundry					
Softening Point	(ASTM E28-92)	166-180°C	>=232*C >=450*F	154-169°C 310-335°F	154-169°C 310-335°F	190-220°C					
Ash	(ASTM D271-70 M)	2.0% Maximum	<=3,0%	0.25-0.40% Typical 0.90% Max. Guaranteed	0.25-0.40%Typical 0.90% Max. Guaranteed	20 % Maximum					
Moisture	(AGC Method)	1.0% Maximum	<=1.0%	0.2-0.5% Typical 0.7% Max. Guaranteed	0.2-0.5% Typical 0.7% Max. Guaranteed	1-3 %					
Penetration	(25°C, 100 gm, 5sec.)	0	0	0	0	0					
Color in Mass	2/47	Black	Black	Black	Black						
Flash Point	(COC)	316°C; 600°F	316°C; 600°F	316°C; 600°F	316°C; 600°F	- 3					
Sulfur		0.3%	0.3%	0.3%	0.3%	496					
Specific Gravity		1.05	1.06	1.04	1.04						
Viscosity	(25°C, 30% solids, Magie 470)		3	1.500-6,000 cPs	1,500-6,000 cPs						



