

## MOTOR GASOLINE SPECIFICATION

TEST	ANALYSIS		UNITS	LIMITS		TEST METHOD	
				MIN	MAX	ASTM	EN
1	DENSITY @ 15 ° C		Kg/m <sup>3</sup>	720	775	D 1298 D 4052	ISO 3675 ISO 12185
2	RESEARCH OCTANE NUMBER (SEE NOTE 1)	PREMIUM		95		D2699	ISO 5164
3	MOTOR OCTANE NUMBER	PREMIUM		85		D2700	ISO 5163
4	REID VAPOR PRESSURE (SEE NOTE 2)					(SEE NOTE 3)	
4.1	SPRING		KPA	50	62	D323	
4.2	SUMMER		KPA	45	60		
4.3	FALL		KPA	50	65		
4.4	WINTER		KPA	60	70		
5	DISTILLATION @ 760 mmHg : (SEE NOTE 2)		% V/V			D 86	ISO 3405
5.1	EVAPORATED AT 70 °C (SPRING, SUMMER,FALL)		% V/V	20	46		
5.2	EVAPORATED AT 70 °C (WINTER)		% V/V	22	46		
5.3	EVAPORATED AT 100 °C (ALL SEASONS)		% V/V	46	71		
5.4	EVAPORATED AT 150 °C (ALL SEASONS)		% V/V	75	-		
5.5	FINAL BOILING POINT (ALL SEASONS)		°C	190	215		
5.6	RESIDUE (ALL SEASONS)		% V/V	-	2		
6	HYDROCAROBN ANALYSIS :					(SEE NOTE 4)	ISO 22854
6.1	OLEFINS		% V/V		18	D6839/D5986/ D1319 D6839/D5986/ D1319 D6277/D5580	EN 1601
6.2	AROMATICS		% V/V		35		EN 13132
6.3	BENZENE		% V/V		1		
7	OXYGEN CONTENT		% M/M		2.7		ISO 22854
8	ALCOHOL		% V/V		NIL		ISO 22854
9	SULFUR		mg/kg		50	D7039/D2622/ D5453	ISO 20846
10	LEAD CONTENT				NIL	D 3237/ D 5059	EN 237
11	EXISTENT GUM (WASHED)		Mg/100ml		5	D 381	
12	COPPER CORROSION (3 HOURS AT 50 °C)		SCALE		CLASS 1	D 130	
13	INDUCTION PERIOD AT 100 °C		MINUTES	360		D 525	
14	COLOR – GREEN (ABSORBANCE AT MAXIMUM WAVE LENGTH) (SEE NOTE 5)				0.16	(SEE NOTE 6 )	
15	Mn CONTENT (SEE NOTE 1)				NIL	D 3831	
16	Fe CONTENT (SEE NOTE 1)				NIL	D 5863	

**Note 1:** The Octane Enhancer Agents Containing: Metals (LIKE FE, MN, PB,...).Aniline and its derivatives (Like N- Methyl Aniline ,N-N- dimity Aniline,...) And Chlorine Contain Agents (like Dichloroethane , 1, 2 Dichloropropane,... ) Aren't Permitted. Any other type of the octane enhancer additives needs the Oil Products Specification committed approval.

**Note 2:** Season definition:

- a) Spring (21<sup>th</sup> March- 4<sup>th</sup> June)
- b) Summer (5<sup>th</sup> June- 5<sup>th</sup> September)
- c) Fall (6<sup>th</sup> September- 20<sup>th</sup> November)
- d) Winter (21<sup>th</sup> November- 20<sup>th</sup> March)

**Note 3:** Gasoline containing oxygenated compounds must be analyzed by ASTM D4953 exclusively.

**Note 4:** ASTM D6839 is completely harmonized with ISO 22854. In samples containing high olefin content ASTM D6839 is preferred in comparison with ASTM D1319

**Note 5:** Dye quantity should be about 1 Mg/L.

(The color of dye shall be green otherwise mentioned by buyer)

Please note dye will be placed on board of vessel and will not be mixed.

**Note 6:** Maximum absorbance in visible region (at  $\lambda_{\max}$ ) should not be greater than 0.16