

## MS IS 2796: 2017 REQUIREMENTS

Sl.No.	Parameters	METHOD	Requirements	
	Grade		RON 91	RON 95
1	Appearance	Visual	Clear & bright, free from undissolved water, foreign matter and other visible impurities.	
2	Colour, Visual		Orange	Red
3	Density @ 15°C, kg/m <sup>3</sup>	IS 1448 P :16/ ASTM D 4052/ ISO 3675/ ISO 12185/ IP 160	720 - 775	720 - 775
4	<b>Distillation</b>	P:18/		
	Percent Evaporated at 70°C, (E 70°C),%V/V	Motor Gasoline	10-45	10-45
		E 10	10-55 (summer)	
			10-58 (other months)	
	Percent Evaporated at 100°C, (E1070°C),%V/V		40-70	40-70
	Percent Evaporated at 150°C, (E150°C),%V/V		Min. 75	Min. 75
	FBP, °C		Max. 210	Max. 210
	Residue, %v		Max. 2	Max. 2
5	Research Octane Number (RON) Min.	IS 1448 P :27 ASTM D 2699	91	95
6	Motor Octane Number (MON) Min	IS 1448 P :26 / ASTM D 2700	81	85
7	Gum content (Solvent washed) (gm/m <sup>3</sup> ), Max.	IS 1448 P :29/ ASTM D 381	40	40
8	Total Sulphur, mg/Kg, Max.	P: 34 / P: 153/ ISO 20847 /ISO 208469)/ ISO 130329/ ASTM D 2622/ D 3120/ D 5453/ D 7220	10	10
9	Lead Content(as Pb), gm/litre, Max.	IP 224 /ASTM D 5059	0.005	0,005
10	Reid Vapour Pressure @ 38°C, kPa, Max	P : 39 / ASTM D 323 (wet methods) / D 5191(dry method)/ D 6378/ EN 13016/		
		MG without ethanol	60	60

		Ethanol Blended MG	67	67
11	Vapour Lock Index (VLI), Max.	As per IS 2796 tabel 1, Calculation : VLI =10 x RVP + 7 x E 70°C	Summer/ (other months)	Summer/ (other months)
		MG without ethanol	750/ (950)	750/ (950)
		Ethanol Blended MG (5% v/v)	900/ (1050)	900/ (1050)
		Ethanol Blended MG (10% v/v)	1050/ (1100)	1050/ (1100)
12	Benzene content,% by volume, Max.	ASTM D 3606 (see Note 3) / ASTM D 55809) / D 6277 / D 6730/ D 6839/ ISO 22854	1	1
13	Copper Strip Corrosion (3 hrs. @ 50°C), Max.	IS 1448 P :15/ ASTM D 130	Not more than 1	Not more than 1
14	Water Tolerance of gasoline alcohol blends, temperature for phase separation, °C,			
	a) Other Months Deg C, Max.		10	10
	b) Winter Deg C, Max.		0	0
15	Engine intake system cleanliness <sup>(3)</sup>	As per IS 2796	Report - MFA used	Report - MFA used
16	Olefin content, %v	IS 1448 P : 23 ASTM D6730	Max. 21	Max. 18
17	Oxidation Stability, minutes	IS 1448 P : 28 / ASTM D 525	Min. 360	Min. 360
18	Aromatics content, %v	IS 1448 P : 23 /ASTM D6730	Max. 35	Max. 35
19	Oxygen content, %wt.	ASTM D 4815	Max. 3.7	Max. 3.7
20	Ethanol content, %V, Max.	ASTM D 4815)/ D 5599 / Annex C (Water extraction)		
		Motor Gasoline	5.0	5.0
		E 10	10.0	10.0
21	Oxygenates content, %v	ASTM D 4815		
	a) Ethers containing 5 or more carbon atoms such as MTBE,ETBE or TAME		Max. 15	Max. 15
	b) Other oxygenates		Not Permitted	Not Permitted
<b>Conforms to BIS spec IS:2796-2017 For Motor Gasoline</b>				