Esso Unleaded Premium ULS

MarketingTechnical Bulletin

Product	Appearance	Specification *
Esso Unleaded Premium ULS Motor Gasoline	Clear liquid, pale yellow in colour	BS EN 228: 2004

***** Esso Unleaded Premium Gasoline also complies with The Motor Fuel (Composition and Content) Regulations 1999 and HM C&E requirements for "Ultra Low Sulphur Petrol".

Application

Spark ignition engines (chiefly automotive vehicles), marine engines (pleasure craft), mobile power sources (power generators), chain saws, lawn mowers and other horticultural equipment. DO NOT USE FOR AVIATION PURPOSES.

Quality Data

Parameter (BS Methods)	Units	BS or HM Customs & Excise Limit Min	Max	Esso Typical
Octane Number - Research (RON)	-	95.0	-	95.5
Octane Number - Motor (MON)	-	85.0	-	85.3
Lead content	mg/l	-	5	Nil
Density @ 15 ^{O}C	kg/m^{3}	720	775	741
Sulphur content	mg/kg	-	50	47
Oxidation stability	min	360	-	>360
Gum content (solvent washed)	mg/100ml	-	5	<0.5
Copper strip corrosion	Rating	Class 1	-	Class 1
Appearance	Visual	Clear and bright	-	Clear and bright
Hydrocarbon type content Olefins Aromatics	 % (V/V) % (V/V)	 - -	 18.0 35.0	 9.2 31.9
Benzene content	% (V/V)	-	1.0	0.7
Oxygen content	% (m/m)	-	2.7	<0.5
MTBE / Ethers containing 5 or more carbon atoms	% (V/V)	--	15.0	1.8
Vapour Pressure @ 37.8^{O}C	KPa	70.0 (W) 45.0 (S)	100.0 (W) 70.0 (S)	99 (W) 68 (S)
Vapour Lock Index - Intermediate	-	-	1250	1219 (SIn) 1220 (AIn)
Distillation: Evaporated @ 70^{O}C	% (V/V)	22.0 (W) 20.0 (S)	50.0 (W) 48.0 (S)	45 (W) 39 (S)
Evaporated @ 100^{O}C	% (V/V)	46.0	71.0	64
Evaporated @ 150^{O}C	% (V/V)	75.0	-	92
Final boiling point	^{O}C	-	210	184
Distillation residue	% (V/V)	-	2	1

Note: Volatility Limits quoted are the legal dates for distribution from the refinery:

Seasonality Dates

Grade	Ex Service Station
W Winter Grade	16 October to 15 April inclusive
SIn Intermediate Grade (Spring)	16 April to 31 May inclusive
S Summer Grade	1 June to 31 August inclusive
AIn Intermediate Grade (Autumn)	1 September to 15 October inclusive

Additional Technical Information

		Units	All Grades
Specific Energy	Gross	MJ/kg	47.28
	Net	MJ/kg	44.15

Calculated using BS2869

'Typicals' are expected qualities based on recent historical production data and should therefore not be considered a guarantee of quality

For Health & Safety information refer to the most current version of the product MSDS