



Unleaded Petrol BS EN 228:2008

Property	Units	Limits		Test Method
		Min	Max	
Research Octane Number, RON		95.0	-	BS EN ISO 5164 ^b
Motor Octane Number, MON		85.0	-	ISO 5163 ^b
Lead Content	mg/l	-	5.0	BS EN 237
Density @ 15°C	kg/m ³	720.0	775.0	BS EN ISO 3675 / 12185
Sulphur Content	mg/kg	-	10.0	BS EN ISO 20846 / 20847 / 20884
Manganese Content ^(d)	until from			
2013-12-31			6.0	EN 16135
2014-01-01 onwards	mg/l	-	2.0	EN 16136
Oxidation Stability	Minutes	360.0	0.0	BS EN ISO 7536
Existent Gum Content	mg/100ml	-	5.0	BS EN ISO 6246
Copper Corrosion (3hr @ 50°C)	rating	Class 1		BS EN ISO 2160
Appearance ^e		Clear and bright		Visual inspection
Hydrocarbon Type Content ^c				
Olefin Content	% v/v	-	18.0	ASTM D1319 / BS EN 15553
Aromatics Content	% v/v	-	35.0	ASTM D1319 / BS ISO 22854
Benzene Content	% v/v	-	1.0	BS EN 12177 / 238 / 14571
Oxygen Content	% m/m	-	2.7	BS EN 1601 / 13132
Oxygenates Content				
Methanol		-	3.0	
Ethanol - including Bioethanol	% v/v	-	5.0	
Iso-Propyl Alcohol	% v/v	-	10.0	
Iso-Butyl Alcohol	% v/v	-	10.0	
Tert-Butyl Alcohol	% v/v	-	7.0	
Ethers (5 or more C atoms)	% v/v	-	15.0	
Other Oxygenates	% v/v	-	10.0	
Vapour Pressure (DVPE)				
Summer (1 June – 31 August)	kPa	45.0	70.0	
Intermediate (1 September – 15 October)	kPa	45.0	100.0	
Winter (16 October – 15 April)	kPa	70.0	100.0	
Intermediate (16 April – 31 May)	kPa	45.0	100.0	
Vapour Lock Index (10VP + 7E70)				
16 April – 31 May			1250.0	
1 September – 15 October			1250.0	
% Evaporated @ 70°C, E70				BS 2000-123
Transition (16 April – 31 May)	v/v	20.0	50.0	
Summer (1 June – 31 August)	v/v	20.0	48.0	
Transition (1 September – 15 October)	v/v	20.0	50.0	
Winter (16 October – 15 April)	v/v	22.0	50.0	
% Evaporated @ 100°C, E100	v/v	46.0	71.0	BS 2000-123
% Evaporated @ 150°C, E150	v/v	75.0	-	BS 2000-123
Final Boiling Point (FBP) °C	°C	-	210	BS 2000-123
Distillation Residue	% v/v	-	2	BS 2000-123

Notes

- The fuel covered by this standard is intended for use in petrol-engined road vehicles which require high octane unleaded petrol.
- Parameters that do not form part of the BS EN 228 are routinely tested as per confidential agreements with individual customers.