

UNLEADED PETROL BS EN 228:2021

PROPERTY	UNITS	LIMITS		TEST METHOD (NOTES)
		MIN	MAX	
Research Octane Number, RON		95.0	-	EN ISO 5164 ^b
Motor Octane Number, MON	mg/l	85.0	-	EN ISO 5163 ^b
Lead Content	kg/m ³	-	5.0	EN 237
Density @ °C^c	mg/kg	720.0	775.0	EN ISO 3675 / 12185
Sulphur Content ^c	mg/l	-	10.0	EN 13032 / 20846 / 20884
Manganese Content ^(d)	until			EN 16135
	2013-12-31		6.0	EN 16136
	2014-01-01 onwards		2.0	
Oxidation Stability	Minutes	360.0	-	EN ISO 7536
Existent Gun Content (solvent washed)	mg/ 100ml	-	5.0	EN ISO 6246
Copper Corrosion (3hr @ 50°C)	rating	Class 1		EN ISO 2160
Appearance ^e		Clear and bright		Visual inspection
Hydrocarbon Type Content^c		-		EN 15553 / EN ISO 22854
Olefin Content	% v/v		18.0	
Aromatics Content	% v/v	-	35.0	
Benzene Content^c	% v/v	-	1.0	EN 238 / 12177 / EN ISO 22854
Oxygen Content^c	% m/m	-	2.7	EN 1601 / 13132 / EN ISO 22854
Oxygenates Content ^c		-		EN 1601 / 13132 / EN ISO 22854
	Methanol ^f	% v/v	-	3.0
	Ethanol ^g	% v/v	-	10.0
	Iso-Propyl Alcohol ^h	} Volume blending restricted to 2,7 % (m/m) maximum oxygen content		
	Iso-Butyl Alcohol ^h			
	Tert-Butyl Alcohol ^h			
	Ethers (5 or more C atoms) ^h			
	Other Oxygenates ^{h,i}			

NOTE: Requirements in bold refer to the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3] and [4]

- See also 5.7.1. in BS EN 228:2012
- A correction of 0,2 for MON and RON shall be subtracted for calculation of the final result, before reporting according to the requirement of the European Fuels Directive 98/70/EC [1], including subsequent Amendments [2], [3] and [4].
- See also 5.7.2. in BS EN 228:2012
- See also 5.3.3. in BS EN 228:2012
- Appearance shall be determined at ambient temperature.
- Stabilising agents shall be added.
- Ethanol when used as a blending component shall conform to EN 15376 (see 5.1 in BS EN 228:2012). Stabilising agents may
- The oxygen content for the finished unleaded petrol shall not exceed 2,7 % (m/m). A CEN/TR on oxygenate blending is under preparation.
- Other mono-alcohols and ethers with a final boiling point no higher than prescribed in Table 4 in BS EN 228:2012