



M A B A N A F T

Sulphur Free Diesel BS EN 590:2013 + A1: 2017

Table 1 - Generally APPLICABLE REQUIREMENTS AND TEST METHODS FOR AUTOMOTIVE DIESEL FUEL

Property	Units	Limits		Test Method (Notes)
		Min	Max	
Density @15°C	kg/m ³	820.0	845.0	EN ISO 3675 (c) / EN ISO 12185
Cold Filter Plugging Point				EN 116 / EN 16329 IP 309
Winter	°C (Note 2)	-	-15	
Summer	°C (Note 2)	-	-5	
Cloud Point				BS EN 23015
Winter	°C (Note 2)	-	-5	
Summer	°C (Note 2)	-	-3	
Flash Point	°C	> 55	-	EN ISO 2719
Cetane Number		51	-	EN ISO 5165 (b) EN 15195 EN16144 EN16715
Cetane Index		46	-	EN ISO 4264
Viscosity at 40°C	mm ² /s	2.000	4.500	EN ISO 3104
Polycyclic Aromatic Hydrocarbons (d)	% (m/m)	-	8.0	EN 12916
Sulphur Content	mg/kg	-	10.0	EN ISO 20846 (e) / 20884 / 13032
Copper Strip Corrosion (3hr @ 50°C)	rating	-	Class 1	EN ISO 2160
Carbon Residue (g) :				
(on 10% Distillation Residue)	% (m/m)	-	0.30	EN ISO 10370
Ash Content	% (m/m)	-	0.010	EN ISO 6245
Total Contamination	mg/kg	-	24	EN 12662 (h)
Water Content	mg/kg	-	0.020	EN ISO 12937
Manganese Content (f)				
2013-12-31	until			
2014-01-01 onwards	from	mg/l	2.0	prEN 16576
Distillation °C				
% (V/V) Recovered at 250°C	% (V/V)	-	< 65	EN ISO 3405
% (V/V) Recovered at 350°C	% (V/V)	85	-	EN ISO 3924
95% (V/V) Recovered at	°C	-	360	
Oxidation Stability (j)	g/m ³ h	20	25	EN 12205
Lubricity, Corrected Wear Scar Diameter (WSD 1,4) at 60 °C	µm	-	460	EN ISO 12156-1
Fatty Acid Methyl Ester (FAME) content (i)	%Vol	-	7.0	BS EN 14078
Filter blocking tendency	_a	-	2.52	IP 387, procedure B only

Notes

1. Latest test methods or technical equivalent used.
2. Unless otherwise advised the following seasonal dates apply: Summer: 16/03 - 15/10 (terminals), Summer: 16/03 - 15/11 (retail sites), Winter: 16/11 - 15/03
3. Fatty acid methyl ester (FAME) meeting EN 14214:2012+A2: 2019
4. Procedure B only i.e. not by calculation from procedure A

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