

CHARACTERIZATION RESULTS OF DIESEL FUEL UNTREATED AND TREATED WITH PROLAB TECHNOLOGIE's DBF-4

ANALYSIS	METHODS	UNITS	EN590 SPECIFICATION			DIESEL	DIESEL	DIESEL
			MIN	TYPICAL	MAX	UNTREATED	+ 250 ppm DBF4	+ 500 ppm DBF4
Density at 15°C	NF EN ISO 12185	kg / m ³	820		845	835.8	835.8	835.9
Distillation (pression at.)	NF EN ISO 3405							
Condensed at 250°C		% volume			65	38.6	38.0	38.5
Condensed at 350°C		% volume	85			95.8	95.0	95.0
95% of volume condensed at		°C			360	347.2	350.2	350.0
Viscosity at 40°C	NF EN ISO 3104	cSt	2.00		4.50	2.614	2.603	2.623
Sulfur content	NF EN ISO 14596	mg/kg			350	42	43	44
Water by Karl Fischer	NF ISO 6296	mg/kg			200	80	80	60
Total contamination	NF EN 12662	mg/kg			24	1	0	1
Ash content	NF EN ISO 6245	% wt			0.01	< 0.001	< 0.001	< 0.001
Measured cetane index	NF EN ISO 5165		51.0			52.5	52.0	51.5
Calculated cetane index	NF EN ISO 4264		46.0			51.1	51.5	51.2
Carbone residue (10%)	NF EN ISO 10370	% wt		note 1	0.30	< 0.10	< 0.10	< 0.10
Copper corrosion, 3 hours at 50°C	NF EN ISO 2160			1		1	1	1
Oxidation stability	NF EN ISO 12205							
Residual insolubles		g/cm ³				8	0	1
Adhering insolubles		g/cm ³				0	1	0
Total insolubles		g/cm ³			25	8	1	1
Utilized filters						2	2	2
Flash point Pensky-Martens	NF EN 22719	°C	55			62.5	63.5	64.5
Lubricity	ISO 12156							
WS1,4		µm			460	314	233	371
Cloud point	NF EN 23015	°C			+5	-6	-5	-6
Filterability temperature limit	NF EN 116	°C			0	-7	-6	-6
Total poly. Aromatic Hydrocarbons	IP 391	% wt			11	3.5	3.5	3.5
Electrical conductivity at 20°C	ISO 6297	pS/m	150			186	173	176

Note 1 : Value based on a product without cetane improver

Analysis realized by SGS Oil, Gas & Chemicals, Pont du Môle 2 - 59140 DUNKERQUE t +33 (0) 3 28 63 05 99
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EN590 describes the physical properties that all diesel fuel must meet if it is to be sold in the EU, Czech Republic, Iceland, Norway or Switzerland.