

HUDSON OIL CORPORATION

Bridging Businesses together

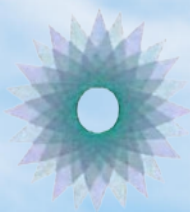
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STANDARD SPECIFICATION OF EN590 10PPM

			Min	Max
Aspect	Visual inspection			Clear
Color	ASTM D 1500			2,0
Density @ 15°	EN ISO 3675:98 / EN ISO 12185:96	Kg/m ³	820,0	845,0
	/ C1:2001			
Flash Point	EN ISO 2719:2002	C°	55(1)	
Distillation:				
- Recovered @ 150 °C		% vol		2,0
- Recovered @ 250 °C	EN ISO 3405:2000	% vol		65,0(2)
- Recovered @ 350 °C		% vol	85,0(2)	
- Recovered at 95%		°C		360,0
C.F.P.P. (summer) (3)		°C		-2
	EN 116:1997			
C.F.P.P. (winter) (3)		°C	50,0	-12
CLOUD Point (summer)		°C	Report	
	EN 23015:1994			
CLOUD Point (winter)		°C		0
Cetane number	EN ISO 5165:1998	n°	51,0	
Cetane index	EN ISO 4264:1996	Index	46,0	
Viscosity @ 40 °C	EN ISO 3104:1996	mm ² /s	2,00	4,50
Water content	EN ISO 12937:2000	mg/kg		200
Total contamination	EN ISO 12662:2002	mg/kg		15
Sulfur content	EN ISO 20884:2004	mg/kg		10,0
Copper strip corrosion (3 hr at 50 °C)	EN ISO 2160: 1998	Indice	1 st Class	
Carbon residue				
	EN ISO 10370:1995	% weight		0,15
(on 10% distillation residue)				
Total acidity	ASTM D 974:2002	mgKOH/g		0,3
Ash content	EN ISO 6245:2002	% weight		0,01
Lubricity, correct wear scar	EN ISO 12156-1:2000	µm		460
Oxidation stability	EN ISO 12205:1996	g/m ³	20	
Electrical conductivity (4)	IP 274; ASTM 2624; ISO 6297	pS/m	50	
Polycyclic aromatic hydrocarbons	EN 12916:2001	%m/m		11,0(6)
Biodiesel content (5)	EN 14078:2003	% vol	4,5	7,0

PROPERTY	UNIT	VALUE	Test Method
Cetane Index	Calc.	46 Min	EN ISO 4264



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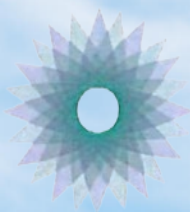
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Product Information Sheet

Cetane Number	CN	51 Min	EN ISO 5165 EN 15195
Density 15° C	Kg/M ³	820 - 845 Min/Max	EN ISO 3765 EN ISO 12185
Polycyclic Aromatics	%m/m	8.0 Max	EN 12916
Sulphur Content	mg/kg	10.0 Max	EN ISO 20846 EN ISO 20884
Flash Point	deg. °C	>55 Min	EN ISO 2719
Carbon Residue	% Mass	0.30 Max	EN ISO 10370
Ash Content	% Mass	0.010 Max	EN ISO 6245
Water Content	mg/kg	200 Max	EN ISO 12937
Total Contamination- Particulate Matter	mg/kg	24 Max	EN 12662
Copper Strip Corrosion (3hrs@50 deg. C	Class	1 Max	EN ISO 2160
Oxidation Stability	g/m ³	25 Max	EN ISO 12205
Lubricity	Microns	460 Max	EN ISO 12156-1
Viscosity @ 40° C	cSt.	2.000-4.500 Min/Max	EN ISO 3104
Distillation:		EN ISO 3405	
% Recovered 250 deg. C	% Vol	65.0 Max	EN ISO 3405
% Recovered 350 deg. C	% Vol	85.0 Min	EN ISO 3405
95% Recovered @	deg. °C	360.0 Max	EN ISO 3405
Fatty Acid Methyl Ester (FAME) Content	% Vol	7.0 Max	EN 14078
Cloud Point	deg. °C	Winter -5 max	EN 23015

Property	Test method	Test Unit	Guarantee	Limit
Density at 15 0C		kg/m3		820-845
Polycyclic aromatic hydrocarbons	EN 12916	wt%	B	Max
Flash Point	EN 2719	0 C	>55	
Cold Filter Plugging Point CFPP	EN 116	0 C		
Winter Grade			-15	max
Summer Grade			5	max



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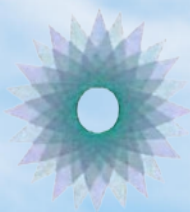
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Distillation	EN ISO 3405			
Recovered at 250C		Vol%	65	max
Recovered at 350C		Vol%	85	min
95% (Vol/Vol) Recovered at		0 C	360	max
Sulphur	EN ISO 20846 EN ISO 20884	mg/kg	10	max
Carbon Residue (on 10%residue)	EN ISO 10370	wt%	0.30	max
Viscosity at 40C	EN ISO 3104	cst	2.0-4.5	
Copper Strip Corrosion (3h a5 50C)	EN ISO 2160	rating	No.1	max
Fatty acid methyl ester(FAME) content	EN 14078	Vol%	7.0	max
Cetane Number	EN ISO 5161 EN15195		51	min
Cetane Index	EN ISO 4264	calculated	46	min
Water	EN ISO 12937	mg/kg	200	max
Particulate Matter	EN 12662	mg/kg	24	max
Oxidation Stability	EN ISO 12205 EN 15751	g/m3 h	25 20	max min
Lubricity (wsd1,4) at 60C	EN ISO 12156/1	um	450	max

TEST	UNITS	LIMITS	METHOD
Density15°C*	kg/m ³	820.0 - 860.0	ASTM 04052
ASTM Color*		2.0Max.	ASTM 06045
Flash Point P.M.C.C*	OC	60 Min.	ASTM O93A
Total Sulphur	mg/kg	10Max.	ASTM 02622
Copper Corrosion,3hrs at 100°C		1.0 Max.	ASTM 0130
Kinematic Viscosity at 40°C	CST	2.0-4.5	ASTM 0445
Pour Point*	OC	+6 Max.	ASTM 05950



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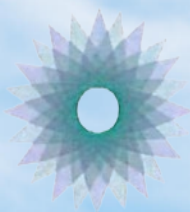
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Ash Content	wt%	0.01 fax.	ASTMD482
Water Content	mg/kg	200 Max.	ASTM 06304
Sediments by Centrifuge	VOI%	0.01Max.	ASTM 02709
Derived Cetane Number		51Min.	ASTM 06890
Cetane Index		46Min.	ASTM O4737A
FAME Content	VOI%	7.0Max.	EN 14078
Lubricity(HFRR)(WSD)t m 60°C		460 Max.	EN 12156-1
Distillation			
50 % Recovery	oc	Report	ASTM D86
90% Recovery	oc	Report	
95% Recovery	oc	360 Max.	
F.B.P	oc	Report	

N	CHARACTERISTICS	Unit	TEST RESULT		TEST METHOD	
			Min	Max	EN STANDRADS	ASTM STAND
1	Cetane number	n ^o	51,0		EN ISO 5165 EN 151	D 613
2	Cetane Index	Index	46,0		EN ISO 4264	D 4737
3	Density at 15°C	kg/m'	820	840	EN ISO 3675 EN ISO 12185	D 4052 D 1298
4	Polycyclic aromatic hydrocarbons	% m/m		11,0	EN 12916	
5	Sulphur content	mg/kg		10	EN ISO 20846 EN ISO 20884	
6	Distillation - Recovered @150 65 °C - Recovered @25085 °C - Recovered @350 95 °C - Recovered @95	% Vol % Vol % Vol °C	85,0	2,0 65,0 360	EN ISO 3405;2000	D86
7	Kinematic viscosity at 40°C	mm ² /s	2,00	4,50	EN ISO 3104	D 445
8	Flash point	°C	55		EN ISO 2719	D93
9	Cold filter plugging point (CFPP):				EN116:1997	



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	(CFPP) Summer	°C		-2		
	(CFPP) Winter	°C	50,0	-12		
1	Cloud point:				EN23015:1994	
	Summer (1 April to 30 September)	cc	Report			D 2500 D 5772
	Winter (1 October to 31 March)	cc		+0		
1	Carbon residue (on 10% distillation residue)	% m/m		0,15	EN ISO 10370	D 4530
1	Lubricity, corrected wear scar diameter (corrected WSD 1,4) at 60°C	µm		460	EN ISO 12156-1	
1	Water content	mg/kg		200	EN ISO 12937	
1	Total, contamination (Solid particles)	mg/kg		15	EN 12662	
1	Ash content	% m/m		0,01	EN ISO 6245	D 482
1	Corrosion to copper (3h at 50°C)	Indice	1stClass		EN ISO 2160	D 130
1	Oxidation stability	g/m3		25	EN ISO 12205	D 2274
1	Oxidation stability (9)	hours	20		EN 15751	
1	FAME Content (10)	% VN		0	EN 14078	
2	Colour	ASTM scale		2,0		D 1500 D 6045
2	Aspect		Cl ar		Visual Inspection	D 4176
2	Biodiesel content	% Vol	4,5	7,0		
2	Electrical Conductivity	% m/m			ISO6297 IP274	D 2624
2	Total, Acidity	MgKOH/g				D 974-06