

CERTIFICATE OF ANALYSIS

T016-004198.001

METHOD	PROPERTY	RESULT	UNITS	MIN	MAX
ISO 5165	Cetane Number	60.7	Rating	51	--
ISO 4264	Cetane Index by Four-variable Equation	67.4	Rating	46	--
EN 12185	Density at 15°C	823.5	kg/m ³	820	845
ASTM D5453-2012	Sulfur Content	4.2	ppm (m/m)	--	10
EN ISO2719 (Method A)	Flash Point Pensky-Martens Closed Cup Automat				
	Observed Flash Point Method A	70.0	°C	55	--
ISO 12937	Water Content by Coulometric KF	0.008	%(m/m)	--	0.02
EN 12662 (1998)	Total Contamination	18.0	mg/kg	--	24
IP 154 / EN ISO 2160	Copper Strip corrosion (3h / 50°C)	1a	Rating	--	--
EN 14078	Fatty Acids Methyl Ester – Range A	3.90	%(V/V)	--	7
ISO 12205	Oxidation Stability of Middle Distillate Fuels Adherent Insolubles	1.1	g/m ³	--	--
	Filterable Insolubles	2.9	g/m ³	--	--
	Total Insolubles	4.0	g/m ³	--	25
ISO 12156-1	Lubricity at 60°C (WS1.4)	253	µm	--	460
ISO 3104	Kinematic Viscosity at 40°C	3.448	mm ² /s	2.0	4.5
ISO 3405	Distillation at Atmospheric Pressure Initial boiling point (IBP)	197.0	°C	--	--
	Recovered at 250°C	13.0	%(V/V)	--	<65
	Recovered at 350°C	86.0	%(V/V)	85	--
	95% Recovered at	358.0	°C	--	360
IP 309	Cold Filter Plugging Point (CFPP)	-4	°C	--	--
IP 391	Aromatic Hydrocarbon Types in Middle Distillates by HPLC				
	Polycyclic Aromatic Hydrocarbons	4.5	%(m/m)	--	8.0
ISO 6245	Ash	<0.01	%(m/m)	--	0.010
ASTM D7111-2014	Elements by ICP in Middle Distillate Fuels Manganese	<1	mg/kg	--	2.0
ASTM D2500-2016	Cloud Point	5	°C	--	--
DIN EN ISO 10370	Carbon Residue (on 10 % Distillation Residue) – Micro Method	0.03	%(m/m)	--	0.30