



760-398-3515 (Fax)



## Certificate of Analysis

Date: 4-14-11

Production Lot No: ME 15: 4-14-11

Test Method	Test	Unit	Specification	Result
ASTM D 6584-10a	Free Glycerin	Mass %	0.020 max	0.000
ASTM D 6584-10a	Total Glycerin	Mass %	0.240 max	0.175
ASTM D 6584-10a	Monoglycerides	Mass %	report	0.500
ASTM D 6584-10a	Diglycerides	Mass %	report	0.136
ASTM D 6584-10a	Triglycerides	Mass %	report	0.246
ASTM D 2709-96	Water and Sediment	Volume %	0.050 max	0.000
ASTM D 2500-09	Cloud Point	°C	report	2
ASTM D 664-09a	Acid Number	mg KOH/g	0.50 max	0.35
ASTM D 4176-04e1	Visual Appearance	1-6	2 max	1
ASTM D 93-10a	Flash Point	°C	130 min	161
ASTM D 7039-07	Sulfur	ppm	15 max	8.1
EN 14112-2003	Oxidation Stability	Hours	3 min	7.0
ASTM D 6304-07	KF Moisture	ppm	1000 max	240
ASTM D 6751-10, Annex A1	Cold Soak Filtration	Seconds	360 max	118
ASTM D 4530-07	Carbon Residue	Mass %	0.05 max	<0.02*
ASTM D 874-07	Sulfated Ash	Mass %	0.02 max	<0.005*
ASTM D 445-10	Kin. Viscosity	mm <sup>2</sup> /sec.	1.9-6.0	4.564*
ASTM D 613-10a	Cetane		47 min	52.6*
ASTM D 130-10	Copper corrosion		No. 3 max	1a*
ASTM D 4951-09	Phosphorous	Mass %	<0.001 max	< 0.001*
ASTM D 1160-06	Distillation, T90	°C	360 max	360*
EN 14538-06	Na+K	ppm	5.0 max	<2.0*
EN 14538-06	Ca+Mg	ppm	5.0 max	< 2.0*

\* Analysis is not of this lot, but based on results of most recent full specification analysis