

**SYMCO INTERNATIONAL, LLC**

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**Certificate of Analysis**Symco International ref: SYM120621Date: 06/21/2012

Lot No: 20120621

Feedstock: Soybean Oil

PROPERTIES	UNITS	TEST METHOD	RESULT
Total Acid Number	mgKOH/g	D664	0.27
Carbon Residue	% mass	D4530	0.001
Cloud Point	°C	D2500	-0.03
Cold Soak Filterability	SECONDS	D7501/D6751	88
Corrosion, copper strip, 3hr @ 50°C	N/A	D130	1a
Cetane Number	N/A	D613	50.7
Relative Density at 60°F	N/A	D1217/D4052	0.885
Distillation - 90% Recovered	°C	D1160	342
Flash Point ( closed cup )	°C	D93	179
Methanol Content	% Vol	EN14110	0.02
Free Glycerin	% mass	D6584	0.007
Total Glycerin	% mass	D6584	0.087
Monoglyceride	% mass	D6584	0.383
Diglycerides	% mass	D6584	0.058
Triglyceride	% mass	D6584	0.000
Kinematic Viscosity @ 40°C	mm <sup>2</sup> /sec	D445	4.04
Ca and Mg Combined	ppm	EN14538	0.01
Na and K Combined	ppm	EN14583	1.0
Oxidation Stability (110°C )	Hours	EN14112	7.2
Phosphorus Content	% mass	EN14107/D4951	<0.0001
Sulphated Ash	% mass	D874	<0.005
Sulphur	ppm	D5453/D7039	0.4
Ester Content	%(m/m)	EN14103	99.8%
Iodine Value		EN14111	130
Visual Inspection	Haze Rating	D4176 #2	1
Water Content	% mass	D6304	230
Water and Sediments	% Vol	D2709	<0.01