



SPECIFICATION FOR BIODIESEL BLENDS B6-B20

Nov. 2008

Biodiesel (B100) and the petroleum diesel must meet their respective ASTM specifications before blending. This specification covers blend between 5 and 20 percent biodiesel by volume blended with petroleum diesel fuel.
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Property	ASTM Method	Limits	Units
Calcium & Magnesium, combined	EN 14538	5 maximum	ppm (ug/g)
Flash Point (closed cup)	D 93	52 minimum	degrees C
Water & Sediment	D 2709	0.05 maximum	% vol.
Kinematic Viscosity, 40 C	D 445	1.9 – 4.1	mm ² /sec.
Ash Content	D 482	0.01 maximum	% mass
Sulfur			
S 15 Grade	D 5453	0.0015 max. (15)	% mass (ppm)
S 500 Grade	D 5453	0.05 max. (500)	% mass (ppm)
Copper Strip Corrosion	D 130	No. 3 maximum	
Cetane	D 613	40 minimum	
Cloud Point	D 2500	report	degrees C
Carbon Residue 100% sample	D 4530*	0.05 maximum	% mass
Acid Number	D 664	0.3 maximum	mg KOH/g
Free Glycerin	D 6584	0.020 maximum	% mass
Total Glycerin	D 6584	0.240 maximum	% mass
Phosphorus Content	D 4951	0.001 maximum	% mass
Distillation, T90 AET	D 86	343 maximum	degrees C
Sodium/Potassium, combined	EN 14538	5 maximum	ppm
Oxidation Stability	EN 14112	6 minimum	hours
Cold Soak Filtration	Annex to D 6751	360 maximum	seconds
For use in temperatures below -12 C	Annex to D 6751	200 maximum	seconds

BOLD = BQ-9000 Critical Specification Testing Once Production Process Under Control

* The carbon residue shall be run on the 100% sample.

A considerable amount of experience exists in the US with a 20% blend of biodiesel with 80% diesel fuel (B20). Although biodiesel (B100) can be used, blends of over 20% biodiesel with diesel fuel should be evaluated on a case-by-case basis until further experience is available.