

## BIODIESEL STANDARDS

		EUROPE	GERMANY	USA	PETROLEUM DIESEL
Specification		EN 14214:2003	DIN V 51606	ASTM D6751	EN 590:1999
Applies to		FAME	FAME	FAAE	Diesel
Density 15 °C	g/cm <sup>3</sup>	0.86-0.90	0.875-0.90		0.82-0.845
Viscosity 40 °C	mm <sup>2</sup> /s	3.5-5.0	3.5-5.0	1.9-6.0	2.0-4.5
Distillation	% @ °C			90%,360 °C	85%,350 °C - 95%,360 °C
Flashpoint	°C	120 min	110 min	130 min	55 min
CFPP	°C	* country specific	summer 0 spr/aut -10 winter -20		* country specific
Cloud point	°C			* report	
Sulphur	mg/kg	10 max	10 max	15 max	350 max
CCR 100%	%mass		0.05 max	0.05 max	
Carbon residue (10%dist.residue)	%mass	0.3 max	0.3 max		0.3 max
Sulphated ash	%mass	0.02 max	0.03 max	0.02 max	
Oxid ash	%mass				0.1 max
Water	mg/kg	500 max	300 max	500 max	200 max
Total contamination	mg/kg	24 max	20 max		24 max
Cu corrosion max	3h/50 °C	1	1	3	1
Oxidation stability	hrs;110 °C	6 hours min			N/A (25 g/m3)
Cetane number		51 min	49 min	47 min	51 min
Acid value	mgKOH /g	0.5 max	0.5 max	0.8 max	
Methanol	%mass	0.20 max	0.3 max		
Ester content	%mass	96.5 min			
Monoglyceride	%mass	0.8 max	0.8 max		
Diglyceride	%mass	0.2 max	0.4 max		
Triglyceride	%mass	0.2 max	0.4 max		
Free glycerol	%mass	0.02 max	0.02 max	0.02 max	
Total glycerol	%mass	0.25 max	0.25 max	0.24 max	
Iodine value		120 max	115 max		
Linolenic acid ME	%mass	12 max			
C(x:4) & greater unsaturated esters	%mass	1 max			
Phosphorus	mg/kg	10 max	10 max	10 max	
Alkalinity	mg/kg		5 max		
Gp I metals (Na,K)	mg/kg	5 max			
GpII metals (Ca,Mg)	mg/kg	5 max			
PAHs	%mass				11 max
Lubricity / wear	µm at 60 °C				460 max
		EUROPE	GERMANY	USA	DIESEL

# FAME 812

ETERINDO'S BIODIESEL



Parameter	Unit	Specifications
Density (15°C)	kg/m <sup>3</sup>	860 - 900
Cloud Point	°C	14 max
Cold Filter Plugging Point	°C	12 max
Flash Point	°C	101 min
Kinematic Viscosity (40°C)	mm <sup>2</sup> /sec	3.5 - 5.0
Moisture	mg/kg	500
Copper Strip Corrosion		No. 1 max
Sulphur	mg/kg	10 max
Carbon Residue	%(m/m)	0.3 max
Cetane Number		51 min
Ash content	%(m/m)	0.02 max
Acid Value	mg KOH/g	0.5 max
Methanol Content	%(m/m)	0.2 max
Free Glycerine	%(m/m)	0.02 max
Total Glycerine	%(m/m)	0.25 max
Ester Content	%(m/m)	96.50 min
Phosphorus	mg/kg	10 max