



American and European Biodiesel Quality Standards

ASTM D-6751

The following table shows the parameters that must be met to achieve ASTM D6751 quality standards:

	Method	Limits	Units
Flash Point, Closed Cup	ASTM D93	93 min	o C
Water and Sediment	ASTM D2709	0.05 max	% volume
Kinematic Viscosity @ 40o C	ASTM D445	1.9 - 6.0	mm ² /s
Sulfated Ash	ASTM D874	0.02 max	% mass
Sulfur			
S 15 Grade	ASTM D5453	0.0015 max	% mass
S 500 Grade	ASTM D5453	0.05 max	% mass
Copper Strip Corrosion	ASTM D130	No 3 max	
Alcohol Content (One of the following must be met)			
Methanol Content	EN 14110	0.20 max	% volume
Flash Point, Closed Cup	D93	130 min	o C
Cetane Number	ASTM D613	47 min.	
Cloud Point	ASTM D2500	Report to Customer	o C
Carbon Residue	ASTM D4530	0.05 max	% mass
Acid Number	ASTM D664	0.50 max	mg KOH/g
Free Glycerin	ASTM D6584	0.02	% mass
Total Glycerin	ASTM D6584	0.24	% mass
Phosphorus	ASTM D4951	10 max	ppm
Vacuum Distillation End Point	ASTM D1160	360 o C max	o C
Oxidation Stability	EN 14112	3 min	hours

Calcium & Magnesium (combined)	EN 14538	5 max	ppm
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European EN14214

The following table shows the parameters that must be met to achieve EN 14214 quality standards:

Parameter	Method	DIN EN14214		
		minimum	maximum	unit
Ester	DIN EN 14103	96,5	-	% (m/m)
Density 5 °C	DIN EN ISO 12185	860	900	kg/m ³
Viscosity 40 °C	DIN EN ISO 3104	3,5	5,0	mm ² /s
Flash point	DIN EN ISO 3679	120	-	°C
CFPP	DIN EN 116	-		°C
Sulphur	DIN EN ISO 20884	-	10,0	mg/kg
Organic matter (10%)	DIN EN ISO 10370	-	0,3	% (m/m)
Octane	IP 498	51,0	-	-
Sulphur ash	ISO 3987	-	0,02	% (m/m)
Water	DIN EN ISO 12937	-	500	mg/kg
Total contamination	DIN EN ISO 2160	-	24	mg/kg
Copper corrosion	DIN EN ISO 2160	1	1	grad corrosion
Oxidation stability (110 °C)	DIN EN 14112	6,0	-	h
Acid number	DIN EN 14104	-	0,5	mg KOH/g
Iodine number	DIN EN 14111	-	120	g iod / 100 g
Linolenic acid methyl-ester	DIN EN 14103	-	12,0	% (m/m)
Methanol	DIN EN 14110	-	0,20	% (m/m)
Free glycerol		-	0,020	% (m/m)
Mono – glycerides		-	0,80	% (m/m)
Di – glycerides	DIN EN 14105	-	0,20	% (m/m)
Triglycerides		-	0,20	% (m/m)
Total glycerol		-	0,25	% (m/m)
Phosphor	DIN EN 14107	-	10,0	
Metals I (Na + K)		-	5,0	
Metals II (Ca + Mg)	DIN EN 14538	-	5,0	

