

International Standards and Australian Test Methods for Biodiesel

Specification or property	Units	Europe (EN 14214)	USA (ASTM 6751-08)	RSA (SANS 1935)	Australia	National Biodiesel	Australian Test Method
Density @ 15°C	kg/m ³	860-900	Report	860-900	860-890	860-890	ASTM D1298
Viscosity @ 40°C	mm ² /s	3.50-5.00	1.9-6.0	3.5-5.0	3.5-5.0	3.5-5.0	ASTM D445
Distillation T90	°C	n/a	360	n/a	360 max	360 max	ASTM D1160
Flashpoint	°C	120 min	130/93 min	120 min	120.0 min	120.0 min	ASTM D93
Sulphur	mg/kg	10.0 max	15 max	10.0 max	10 max	10 max	ASTM D5453
10% Carbon residue	%mass	0.30 max	n/a	0.3 max	0.30 max	0.30 max	ASTM D4530
100% Carbon residue	%mass	n/a	0.050 max	n/a	n/a	n/a	-
Sulphated ash	%mass	0.02 max	0.020 max	0.02 max	0.020 max	0.020 max	ASTM D874
Water and sediment	%vol/ppm	500 max	500 max	500 max	0.050 max	0.050 max	ASTM D2709
Total contamination	mg/kg	24 max	n/a	24 max	24 max	24 max	EN 12662
Cu strip corrosion	3h@50°C	Class 1 max	No. 3 max	Class 1 max	Class 1 max	Class 1 max	ASTM D130 EN ISO 2160
Oxidation stability	h@110°C	6.0 min	3 min	6 min	6 min	6 min	EN 14112 prEN 15751
Cetane number	-	51.0 min	47 min	51.0 min	51.0 min	47 min*	ASTM D613 ASTM D6890
Linolenic acid	%mass	12.0 max	n/a	12 max	n/a	n/a	-
Polyunsaturated (≥ 4)	mg/kg	1 max	n/a	1 max	n/a	n/a	-
Acid value	mgKOH/g	0.50 max	0.50 max	0.5 max	0.80 max	0.80 max	ASTM D664
Methanol	%mass	0.20 max	0.2 max	0.2 max	0.20 max	0.20 max	EN 14110
Ester content	%mass	96.5 min	n/a	96.5 min	96.5 min	96.5 min	EN 14103
Monoglyceride	%mass	0.80 max	n/a	0.8 max	n/a	n/a	-
Diglyceride	%mass	0.20 max	n/a	0.2 max	n/a	n/a	-
Triglyceride	%mass	0.20 max	n/a	0.2 max	n/a	n/a	-
Free glycerol	%mass	0.02 max	0.020 max	0.02 max	0.020 max	0.020 max	ASTM D6584
Total glycerol	%mass	0.25 max	0.240 max	0.25 max	0.250 max	0.250 max	ASTM D6584
Iodine number	g ₂ /100g	120 max	n/a	140 max	n/a	n/a	-
Phosphorous	mg/kg	10.0 max	10 max	10.0 max	10 max	10 max	EN 14107
Group I (Na + K)	mg/kg	5.0 max	5 max	5.0 max	5 max	5 max	EN 14538
Group II (Ca + Mg)	mg/kg	5.0 max	5 max	5.0 max	5 max	5 max	EN 14538
Cold Soak Filterability	seconds	n/a	360 max	n/a	n/a	360 max	Annex A1 to D6751-08
Cloud Point	°C	Report on request	Report	Report on request	Report on request	Report on request	ASTM D2500
CFPP	°C	Report on request	Report on request	-4 winter +3 summer	Report on request	-4 (Approx)	ASTM D4539

* Soy biodiesel varies from the Biodiesel Standard described in the *Fuel Standard (Biodiesel) Determination 2003* and is supplied under approval granted by the Commonwealth Minister for the Environment and Water Resources to The National Biofuels Group Pty Ltd under Section 13 of the *Fuel Quality Standards Act 2000*.