

International Standards for Biodiesel and South African Test Methods

Specification or property	Units	Europe (EN 14214)	USA (ASTM 6751-08)	RSA (SANS 1935)	Australia	RSA Test Method
Density @ 15°C	kg/m ³	0.86-0.90	Report	0.86-0.90	0.86-0.89	ISO 3675 ISO 12185
Viscosity @ 40°C	mm ² /s	3.5-5.0	1.9-6.0	3.5-5.0	3.5-5.0	ISO 3104
Distillation T90	°C	n/a	360	n/a	360 max	-
Flashpoint	°C	120 min	130/93 min	120 min	120 min	ISO 3679
Sulphur	mg/kg	10.0 max	15 max	10 max	10 max	ISO 20846 ISO 20884
10% Carbon residue	%mass	0.30 max	n/a	0.3 max	0.3 max	ASTM D1160
100% Carbon residue	%mass	n/a	0.050 max	n/a	n/a	-
Sulphated ash	%mass	0.02 max	0.020 max	0.02 max	0.02 max	ISO 3987
Water and sediment	mg/kg	500 max	500 max	500 max	500 max	ISO 12937
Total contamination	mg/kg	24 max	n/a	24 max	24 max	EN 12662
Cu strip corrosion	3h@50°C	Class 1 max	No. 3 max	Class 1 max	Class 1 max	ISO 2160
Oxidation stability	h@110°C	6 min	3.0 min	6 min	6 min	EN 14112
Cetane number	-	51.0 min	47 min	51 min	51 min	ISO 5165
Linolenic acid	%mass	12.0 max	n/a	12 max	n/a	EN 14103
Polyunsaturated (≥ 4)	%mass	1 max	n/a	1 max	n/a	Under development
Acid value	mgKOH/g	0.50 max	0.50 max	0.50 max	0.80 max	EN 14104
Methanol	%mass	0.20 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	EN 14103
Monoglyceride	%mass	0.80 max	n/a	0.8 max	n/a	EN 14105
Diglyceride	%mass	0.20 max	n/a	0.2 max	n/a	EN 14105
Triglyceride	%mass	0.20 max	n/a	0.2 max	n/a	EN 14105
Free glycerol	%mass	0.02 max	0.020 max	0.02 max	0.02 max	EN 14105 EN 14106
Total glycerol	%mass	0.25 max	0.24 max	0.25 max	0.25 max	EN 14105
Iodine number	gl ₂ /100g	120 max	n/a	140 max	n/a	EN 14111
Phosphorous	mg/kg	10.0 max	10 max	10 max	10 max	EN 14107
Group I (Na + K)	mg/kg	5 max	5 max	5 max	5 max	EN 14108 EN 14109
Group II (Ca + Mg)	mg/kg	5 max	5 max	5 max	5 max	prEN 14538
Cold Soak Filterability	seconds	n/a	360 max	n/a	n/a	-
Cloud Point	°C	Report on request	Report	Report on request	Report on request	-
CFPP	°C	Report on request	Report on request	-4 winter +3 summer	Report on request	EN 116