



Fuel Standard (Biodiesel) Determination 2003

as amended

made under section 21 of the

Fuel Quality Standards Act 2000

This compilation was prepared on 4 September 2006
taking into account amendments up to *Fuel Standard (Biodiesel) Amendment
Determination 2004 (No. 1)*

The text of any of those amendments not in force on that date is appended in the
Notes section

Prepared by the Office of Legislative Drafting and Publishing,
Attorney-General's Department, Canberra

	Page
Contents	
1 Name of Determination [see Note 1]	3
2 Commencement [see Note 1]	3
3 Definitions	3
4 Fuel standards for biodiesel	3
5 Testing methods	4
Notes	6

1 Name of Determination [see Note 1]

This Determination is the *Fuel Standard (Biodiesel) Determination 2003*.

2 Commencement [see Note 1]

This Determination commences on gazettal.

3 Definitions

In this Determination:

ASTM International means the standards development organisation of that name.

biodiesel means a diesel fuel obtained by esterification of oil derived from plants or animals.

Energy Institute means the standards development organisation of that name.

European Committee for Standardisation (CEN) means the standards development organisation of that name.

4 Fuel standards for biodiesel

- (1) Biodiesel that contains a substance mentioned in the following table must not contain more than the amount mentioned for the substance from the date mentioned for the substance.

Item	Substance	Amount	Date
1	Sulfur	50 mg/kg	18 September 2003
2	Sulfur	10 mg/kg	1 February 2006
3	Sulfated ash	0.020% mass	18 September 2003
4	Carbon residue — 10% distillation residue; or	0.30% mass	18 September 2003
	Carbon residue — 100% distillation sample	0.050% mass	18 September 2003
5	Water and sediment	0.050% vol	18 September 2003
6	Phosphorus	10 mg/kg	18 September 2003
7	Free glycerol	0.020% mass	18 September 2004
8	Total glycerol	0.250% mass	18 September 2004
9	Metals — Group I (Na, K)	5 mg/kg	18 September 2004
10	Metals — Group II (Ca, Mg)	5 mg/kg	18 September 2004
11	Methanol	0.20% (m/m)	18 December 2004

Section 5

- (2) A property of biodiesel mentioned in the following table must meet the specification mentioned for the property from the date mentioned for the property.

Item	Property	Specification	Date
1	Density at 15°C	860 to 890 kg/m ³	18 September 2003
2	Distillation T90	360°C (max)	18 September 2003
3	Viscosity	3.5 to 5.0 mm ² /s @ 40°C	18 September 2003
4	Flashpoint	120.0°C (min)	18 September 2003
5	Copper strip corrosion (3hrs @ 50°C)	(a) if the biodiesel contains no more than 10 mg/kg of sulfur — Class 1 (max) (b) if paragraph (a) does not apply — No. 3 (max)	18 December 2004
6	Ester content	96.5% (m/m) (min)	18 September 2003
7	Acid value	0.80 mg KOH/g (max)	18 September 2003
8	Total contamination	24 mg/kg (max)	18 September 2004
9	Cetane number	51.0 (min)	18 September 2005
10	Oxidation stability	6 hours @ 110°C (min)	18 September 2004

5 Testing methods

- (1) Compliance with the standard set out in section 4 for the substance or property is determined by the testing method, as in force on 18 December 2004, for the substance or property in the following table:

Item	Substance or property	Testing method
1	Acid value	ASTM D664
2	Methanol	prEN 14110
3	Carbon residue — 10% distillation residue	EN ISO 10370
4	Carbon residue — 100% distillation sample	ASTM D4530
5	Cetane number	EN ISO 5165, ASTM D613, ASTM D6890 or IP 498/03

Item	Substance or property	Testing method
6	Contamination (total)	EN 12662 or ASTM D5452
7	Copper strip corrosion	(a) for specification Class 1 (max) — EN ISO 2160 or ASTM D130 (b) for specification No. 3 (max) — ASTM D130
8	Density	ASTM D1298 or EN ISO 3675
9	Distillation T90	ASTM D1160
10	Ester content	prEN 14103
11	Flashpoint	ASTM D93
12	Glycerol (free)	ASTM D6584
13	Glycerol (total)	ASTM D6584
14	Metals — Group I (Na, K)	prEN 14108 and prEN 14109
15	Metals — Group II (Ca, Mg)	prEN 14538
16	Oxidation stability	prEN 14112 or ASTM D2274 (as relevant to biodiesel)
17	Phosphorus	ASTM D4951
18	Sulfur	ASTM D5453
19	Sulfated ash	ASTM D874
20	Viscosity	ASTM D445
21	Water and sediment	ASTM D2709

(2) For subsection (1):

- (a) ASTM followed by an alphanumeric code means the testing method developed by ASTM International under the alphanumeric code; an
- (b) prEN, EN and EN ISO followed by a number means the testing method developed by the European Committee for Standardisation (CEN) under the code and number; and
- (c) IP, followed by a number, means the testing method developed by the Energy Institute under the code and number.

Table of Instruments

Notes to the *Fuel Standard (Biodiesel) Determination 2003*

Note 1

The *Fuel Standard (Biodiesel) Determination 2003* (in force under section 21 of the *Fuel Quality Standards Act 2000*) as shown in this compilation is amended as indicated in the Tables below.

Table of Instruments

Title	Date of notification in Gazette	Date of commencement	Application, saving or transitional provisions
<i>Fuel Standard (Biodiesel) Determination 2003</i>	19 Sept 2003 (see <i>Gazette</i> 2003, No. S360)	19 Sept 2003	
<i>Fuel Standard (Biodiesel) Amendment Determination 2004 (No. 1)</i>	8 Dec 2004 (see <i>Gazette</i> 2004, No. GN 49)	Ss. 1–3 and Schedule 1: 8 Dec 2004 Schedule 2: 18 Dec 2004	—

Table of Amendments

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
S. 3.....	am. 2004 No. 1
S. 4.....	am. 2004 No. 1
S. 5.....	am. 2004 No. 1
