

Fuel Quality Standards (Biodiesel) Determination 2019

I, Angus Taylor, Minister for Energy and Emissions Reduction, make the following determination.

Dated 18 September 2019

Angus Taylor Minister for Energy and Emissions Reduction

Contents

1	Name	1
2	Commencement	1
3	Authority	1
4	Definitions	1
5	Fuel standard for biodiesel	1

1 Name

This instrument is the Fuel Quality Standards (Biodiesel) Determination 2019.

2 Commencement

This instrument commences on 1 October 2019.

3 Authority

This instrument is made under section 21 of the *Fuel Quality Standards Act* 2000.

4 Definitions

Note:

A number of expressions used in this instrument are defined in section 4 of the Act, including the following:

- (a) *fuel*
- (b) inspector

In this instrument:

Act means the Fuel Quality Standards Act 2000.

ASTM followed by an alphanumeric code means the testing method developed under that code by the standards development organisation called ASTM International.

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

diesel has the same meaning as in the *Fuel Quality Standards (Automotive Diesel) Determination 2019.*

EN followed by a numeric code means the testing method developed under that code by the European Committee for Standardization.

mg/kg means milligrams per kilogram, and is equivalent to 'parts per million' or 'ppm' by mass.

% v/v means per cent volume by volume, and is equivalent to 'volume %', 'vol %' and '% vol'.

% *m/m* means per cent mass by mass, and is equivalent to 'mass %', '% mass' and 'weight %'.

5 Fuel standard for biodiesel

(1) In relation to a parameter mentioned in an item of the following table, biodiesel must comply with the specification for that parameter mentioned in that item.

ltem	Parameter	Specification	Testing Method
1	Acid value	0.50 mg KOH/g maximum	ASTM D664
2	Carbon residue—10% distillation residue	0.30% m/m maximum	ASTM D4530
3	Cold soak filterability	360 seconds maximum	ASTM D7501
4	Copper corrosion—3 h at 50°C	Class 1 maximum	ASTM D130
5	Density at 15°C	860–900 kg/m ³	ASTM D1298
6	Derived cetane number	51.0 minimum	ASTM D6890
7	Distillation—T90	360°C maximum	ASTM D1160
8	Ester content	96.5% m/m minimum	EN 14103
9	Flash point	120.0°C minimum	ASTM D93
10	Glycerides—monoglycerides	0.7% m/m maximum	ASTM D6584
11	Glycerides—diglycerides	0.2% m/m maximum	ASTM D6584
12	Glycerides—triglycerides	0.2% m/m maximum	ASTM D6584
13	Glycerol—free	0.020% m/m maximum	ASTM D6584
14	Glycerol—total	0.250% m/m maximum	ASTM D6584
15	Kinematic viscosity at 40°C	$3.5-5.0 \text{ mm}^2/\text{s}$	ASTM D445
16	Metals—Group I—Na, K	5 mg/kg maximum	EN 14538
17	Metals—Group II—Ca, Mg	5 mg/kg maximum	EN 14538
18	Methanol	0.20% m/m maximum	EN 14110
19	Oxidation stability at 110°C	8.0 hours minimum	EN 14112
20	Phosphorus	4.0 mg/kg maximum	EN 14107
21	Sulfated ash	0.020% m/m maximum	ASTM D874
22	Sulfur	10 mg/kg maximum	ASTM D5453
23	Total contamination	24 mg/kg maximum	EN 12662
24	Water	500 mg/kg maximum	ASTM D6304

- (2) For subsection (1), compliance with the specification for a parameter is determined by using the testing method for that parameter mentioned in that item of the table.
 - Note: The testing methods listed in the table are the methods that will be used by inspectors and other persons authorised to conduct tests on fuel under the Act to determine whether the fuel complies with the relevant fuel standard. Subsection (2) does not prevent other persons (including persons supplying fuel) from using other test methods to ensure that the fuel complies with the relevant fuel standard.