Fuel Quality Standards (Automotive Diesel) Determination 2019

I, Melissa Price, Minister for the Environment, make the following determination.

Dated 18 March 2019

Melissa Price
Minister for the Environment

Contents

1 Name

This instrument is the *Fuel Quality Standards (Automotive Diesel) 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) ***supply***

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 has the same meaning as in the *Fuel Quality Standards (Biodiesel) Determination 2019*.

diesel means all fuel supplied or represented as automotive diesel, including renewable diesel and synthetic diesel and any combination of these.

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

IP followed by a numeric code means the testing method developed under that code by the chartered professional body called the Energy Institute.

renewable diesel means liquid fuel that is manufactured by chemically altering and hydrotreating (or equivalent) vegetable oils, animal fats, organic waste and other biomass, but also includes non-organic waste that cannot be reasonably recycled. It is not directly made from any fossil fuel.

synthetic diesel means paraffinic diesel manufactured by chemically altering any feedstock.

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 diesel

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

(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.

Item	Parameter	Specification	Testing Method
1	Ash	0.01% m/m maximum	ASTM D482
2	Biodiesel	5.0% v/v maximum	EN 14078
3	Carbon residue—10% distillation residue	0.2% m/m maximum	ASTM D4530
4	Cetane index	46 minimum	ASTM D4737 Procedure A
5	Conductivity at ambient temperature	Diesel held by a terminal or refinery for sale or distribution: 50 pS/m minimum at ambient temperature	ASTM D2624
6	Copper corrosion—3 h at 50°C	Class 1	ASTM D130
7	Density at 15°C	820–850 kg/m^3	ASTM D1298
8	Derived cetane number	Diesel containing biodiesel: 51 minimum	ASTM D6890
9	Distillation—T95	360°C maximum	ASTM D86
10	Flash point	61.5°C minimum	ASTM D93
11	Filter blocking tendency	2.0 maximum	IP 387
12	Kinematic viscosity	2.0–4.5 mm^2/s at 40°C	ASTM D445
13	Lubricity	460 µm maximum	IP 450
14	Oxidation stability	2.5 mg/100 mL maximum	ASTM D2274
15	Polycyclic aromatic hydrocarbons (PAH)	11% m/m maximum	IP 391
16	Sulfur	10 mg/kg maximum	ASTM D5453

Item	Parameter	Specification	Testing Method
17	Water and sediment	0.05% v/v maximum	ASTM D2709
18	Water	Diesel containing biodiesel: 200 mg/kg maximum	ASTM D6304

(3) Specifications set out in the table apply to all kinds of diesel unless otherwise stated.

(4) Any biodiesel component of diesel must meet the requirements of the fuel quality standard for biodiesel set out in the *Fuel Quality Standards (Biodiesel) Determination 2019*.