Fuel Quality Standards (Paraffinic Diesel) Determination 2025

I, Chris Bowen, Minister for Climate Change and Energy, make the following determination.

Dated **16/02/2025**

Chris Bowen
Minister for Climate Change and Energy

Contents

1 Name

This instrument is the *Fuel Quality Standards (Paraffinic Diesel) Determination 2025*.

2 Commencement

(1) Each provision of this instrument specified in column 1 of the table commences, or is taken to have commenced, in accordance with column 2 of the table. Any other statement in column 2 has effect according to its terms.

Commencement information		
Column 1	**Column 2**	**Column 3**
Provisions	**Commencement**	**Date/Details**
1. The whole of this instrument	The day after this instrument is registered.	

Note: This table relates only to the provisions of this instrument as originally made. It will not be amended to deal with any later amendments of this instrument.

(2) Any information in column 3 of the table is not part of this instrument. Information may be inserted in this column, or information in it may be edited, in any published version of this instrument.

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 *Fuel Quality Standards Act 2000*, including fuel.

In this instrument:

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 2025.*

conventional diesel has the same meaning as in the *Fuel Quality Standards (Conventional Diesel) Determination 2025.*

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.

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

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

paraffinic diesel means a fuel that:

(a) consists of a minimum of 95% paraffinic (alkane) hydrocarbons before any blending with biodiesel; and

(b) is suitable for use as a substitute for conventional diesel.

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

5 Fuel standard for paraffinic diesel

(1) In relation to a parameter mentioned in an item of the following table, paraffinic 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.

Fuel standard for paraffinic diesel

Item	Parameter	Specification	Testing Method
1	Ash content	0.01% m/m maximum	ASTM D482
2	Biodiesel	7.0% v/v maximum	EN 14078
3	Carbon residue—10% distillation residue	0.3% m/m maximum	ASTM D4530
4	Conductivity at ambient temperature	For paraffinic diesel held by a terminal or refinery for sale or distribution: 50 pS/m minimum at ambient temperature	ASTM D2624
5	Copper strip corrosion—3 h at 50°C	Class 1	ASTM D130
6	Density at 15°C	765–810 kg/m³	ASTM D1298
7	Derived cetane number	51 minimum	ASTM D6890
8	Distillation: (a) % v/v recovered at 250°C; (b) % v/v recovered at 350°C; (c) T95	(a) for % v/v recovered at 250°C: 65% v/v maximum; (b) for % v/v recovered at 350°C: 85% v/v minimum; (c) for T95: 360°C maximum	ASTM D86
9	Filter blocking tendency	2.0 maximum	IP 387
10	Flash point	61.5°C minimum	ASTM D93

Fuel standard for paraffinic diesel			
Item	**Parameter**	**Specification**	**Testing Method**
11	Kinematic viscosity	2.0–4.5 mm^2/s at 40°C	ASTM D445
12	Lubricity	400 µm maximum	IP 450
13	Manganese content	2.0 mg/kg maximum	EN 16576
14	Oxidation stability for all paraffinic diesel	2.5 mg/100 mL maximum	ASTM D2274
15	Oxidation stability for paraffinic diesel with >2.0 vol% biodiesel	20.0 hours minimum	EN 15751
16	Sulfur content	10 mg/kg maximum	ASTM D5453
17	Total aromatics content	1.7 % m/m maximum	EN 12916 Procedure B
18	Total contamination	24 mg/kg maximum	EN 12662
19	Water content	200 mg/kg maximum	ASTM D6304

(3) Any biodiesel component of paraffinic diesel must meet the requirements of section 6 of the *Fuel Quality Standards (Biodiesel) Determination 2025*.