

Fuel Quality Standards (Conventional 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

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1 Name

This instrument is the Fuel Quality Standards (Conventional 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Note: This table relates only to the provisions of this instrument as originally made.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 means all fuel supplied or represented as automotive diesel, excluding paraffinic diesel.

conventional diesel/paraffinic diesel blend means a fuel that is a blend of conventional diesel and paraffinic diesel and has a density of between 765 kg/m³ and less than 820 kg/m³ at 15°C.

Note: The density is to be determined in accordance with item 7 of the table in subsection 6(2) of this instrument.

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

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

5 Schedules

Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

6 Fuel standard for conventional diesel

- (1) In relation to a parameter mentioned in an item of the following table, conventional diesel and conventional diesel/paraffinic diesel blends must comply with the relevant specification for that parameter mentioned in that item.
- (2) For subsections (1) and (6), 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 conventional diesel and conventional diesel/paraffinic diesel blends			
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	for conventional diesel not containing biodiesel: 46 minimum	ASTM D4737 Procedure A
5	Conductivity at ambient temperature	for conventional diesel and conventional diesel/paraffinic diesel blends 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

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Fuel standard for conventional diesel and conventional diesel/paraffinic diesel blends			
Item	Parameter	Specification	Testing Method
7	Density at 15°C	(a) for conventional diesel: 820–850 kg/m ³	ASTM D1298
		(b) for conventional diesel/paraffinic diesel blends: between 765 and less than 820 kg/m ³	
8	Derived cetane number	 (a) for conventional diesel and conventional diesel/paraffinic diesel blends containing biodiesel: 51 minimum; 	ASTM D6890
		(b) for conventional diesel/paraffinic diesel blends not containing biodiesel: 46 minimum	
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	 (a) for conventional diesel: 460 μm maximum; 	IP 450
		(b) for conventional diesel/paraffinic diesel blends containing 50% or more conventional diesel: 460 μm maximum	
		(c) for conventional diesel/paraffinic diesel blends containing less than 50% conventional diesel: 400 μm maximum	
14	Oxidation stability	2.5 mg/100 mL maximum	ASTM D2274
15	Polycyclic aromatic hydrocarbons	11% m/m maximum	IP 391
16	Sulfur	10 mg/kg maximum	ASTM D5453
17	Water and sediment	0.05% v/v maximum	ASTM D2709
18	Water	for conventional diesel and conventional diesel/paraffinic diesel blends containing biodiesel: 200 mg/kg maximum	ASTM D6304

(3)Any biodiesel component of conventional diesel must meet the requirements of section 6 of the *Fuel Quality Standards (Biodiesel) Determination 2025* prior to being blended with conventional diesel.

(4)Any biodiesel that is blended with a conventional diesel/paraffinic diesel blend must meet the requirements of section 6 of the *Fuel Quality Standards (Biodiesel) Determination 2025* prior to being blended with the conventional diesel/paraffinic diesel blend.

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- (5)Any conventional diesel component of a conventional diesel/paraffinic diesel blend must meet the requirements of this instrument prior to being blended with paraffinic diesel.
- (6)Any paraffinic diesel component of a conventional diesel/paraffinic diesel blend must meet the definition of paraffinic diesel set out in the *Fuel Quality Standards* (*Paraffinic Diesel*) Determination 2025 and the relevant specification for each parameter mentioned in an item of the following table prior to being blended with conventional diesel.

Requirements for a paraffinic diesel component of a conventional diesel/paraffinic diesel blend			
Item	Parameter	Specification	Testing Method
1	Density at 15°C	765–810 kg/m ³	ASTM D1298
2	Derived cetane number	51 minimum	ASTM D6890
3	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; 	ASTM D86
		(c) for T95: 360°C maximum	

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Schedule 1—Repeals

Fuel Quality Standards (Automotive Diesel) Determination 2019

1 The whole of the instrument

Repeal the instrument.