



**THE PETROLEUM PRODUCTS SPECIFICATIONS
REGULATIONS 1995**

CATHERINE A. TIZARD, Governor-General

ORDER IN COUNCIL

At Wellington this 20th day of November 1995

Present:

THE RIGHT HON. D. C. MCKINNON PRESIDING IN COUNCIL

PURSUANT to the Ministry of Energy (Abolition) Act 1989, Her Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

ANALYSIS

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REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Petroleum Products Specifications Regulations 1995.

(2) These regulations shall come into force on the 1st day of January 1996.

2. Interpretation—(1) In these regulations, unless the context otherwise requires,—

“Diesel” means a refined petroleum distillate having a viscosity and distillation range intermediate between those of kerosene and light lubricating oil, whether or not it contains additives, intended for use as a fuel in internal combustion engines ignited by compression:

“Fuel” means diesel or petrol:

“Marine use” means the use or intended use of diesel on a boat or ship:

“Oxygenates” means alcohols and ethers added to fuel:

“Petrol” means a refined petroleum distillate, normally boiling within the limits of 30 degrees Celsius to 220 degrees Celsius, whether or not it contains additives, intended for use as a fuel in spark-ignition internal combustion engines:

“Petroleum” has the same meaning as it has in section 2 (1) of the Crown Minerals Act 1991:

“Retail sale” means a sale to an end user who has no written supply agreement or written contract with the supplier in respect of the sale.

(2) In these regulations,—

“ASTM” means the American Society for Testing and Materials:

“BS” means British Standard:

“DIN” means the German Institute for Standardisation:

“IP” means the Institute of Petroleum, London.

(3) In these regulations the letter “D” and a series of numerals, or a series of numerals immediately following an expression referred to in subclause (2) of this regulation, means the latest version of the document identified by that serial number.

(4) Where a test method prescribed in these regulations provides for a joint method, each of the alternative methods shall have equal standing, and either of those methods may be used.

3. Requirements relating to fuel sold by retail—(1) The requirements imposed by subclauses (2), (3), and (4) of this regulation shall apply to all fuel, however described, supplied, or available or intended for supply, by way of retail sale:

Provided that those requirements shall not apply to any fuel that is to be used—

(a) As an aviation fuel; or

(b) For motor car racing; or

(c) For jet boat and power boat racing; or

(d) For motor cycle racing.

(2) Regular grade petrol shall have properties that conform to the limits specified in the First Schedule to these regulations, when tested by the methods specified in that Schedule.

(3) Premium grade petrol shall have properties that conform to the limits specified in the Second Schedule to these regulations, when tested by the methods specified in that Schedule.

(4) Diesel shall have properties that conform to the limits specified in the Third Schedule to these regulations, when tested by the methods specified in that Schedule.

4. Requirements relating to all fuel—(1) The requirements imposed by subclauses (2), (3), and (4) of this regulation shall apply to all fuel

supplied or available or intended for supply (whether by way of sale or otherwise) of any end use other than—

- (a) As an aviation fuel; or
- (b) For motor car racing; or
- (c) For jet boat and power boat racing; or
- (d) For motor cycle racing.

(2) Regular grade petrol shall have properties in respect of sulphur, lead, and benzene that conform to the limits specified in the First Schedule to these regulations, when tested by the methods specified in that Schedule.

(3) Premium grade petrol shall have properties in respect of sulphur, lead, and benzene that conform to the limits specified in the Second Schedule to these regulations, when tested by the methods specified in that Schedule.

(4) Diesel shall have properties in respect of sulphur that conform to the limit specified in the Third Schedule to these regulations, when tested by the methods specified in that Schedule.

5. Test procedures—(1) The procedure for obtaining a representative sample of fuel for testing by the test methods set out in these regulations shall be as set out in Part 1 of BS 3195 and in Section 2.2 of BS 4040, BS EN 228, and BS EN 590.

(2) In the event of a dispute as to the appropriate value, nature, or rating of any of the properties listed in the Schedules to these regulations or referred to in these regulations, the relevant procedures specified in BS 4306 shall be used to interpret the laboratory results.

6. Sampling of fuel, etc.—The importer or wholesale supplier or retailer of any fuel to which these regulations apply shall—

- (a) Permit a person authorised for the purpose by the Secretary to take a sample of the fuel before it is discharged from a vessel or pipeline or pump for distribution or sale; or
- (b) In the case of an importer or wholesale supplier, supply such an authorised person with a certificate describing the properties and value of any such fuel—

if the authorised person so requests.

7. Withdrawal of fuel from sale, etc.—If the Minister is satisfied that the properties of any fuel to which these regulations apply do not comply with the relevant provisions of these regulations, the Minister may by written notice given to any distributor of the fuel require the distributor to—

- (a) Withdraw the fuel from retail sale or cease making it available for retail sale; or
- (b) Withdraw the fuel from availability, or cease making it available, for any end use, other than use as an aviation fuel—

as the case may require.

8. Offences—Every person who—

- (a) Supplies, or makes available for supply, any fuel other than in accordance with regulation 3 or regulation 4 of these regulations; or
- (b) Fails to comply with a request made under regulation 6 of these regulations; or

(c) Fails to comply with a requirement made under regulation 7 of these regulations—
commits an offence and is liable on summary conviction to a fine not exceeding \$1,000.

9. Transitional provisions—Notwithstanding anything in these regulations, during the period commencing on the 1st day of January 1996 and ending with the close of the 30th day of September 1996—

(a) Leaded petrol (as that term is defined in regulation 2 of the Ministry of Energy (Petroleum Products Specifications) Regulations 1988) that had been imported into New Zealand, or refined in New Zealand, before the 1st day of January 1996; and

(b) Any mixture of—

(i) Leaded petrol to which paragraph (a) of this regulation applies; and

(ii) Premium grade unleaded petrol that complies with these regulations—

may be supplied, or made available for supply, by way of retail sale or otherwise.

10. Revocations—The following regulations are hereby revoked:

(a) The Ministry of Energy (Petroleum Products Specifications) Regulations 1988*:

(b) The Ministry of Energy (Petroleum Products Specifications) Regulations 1988, Amendment No. 1†:

(c) The Ministry of Energy (Petroleum Products Specifications) Regulations 1988, Amendment No. 3‡.

*S.R. 1988/303

†S.R. 1990/347

‡S.R. 1994/260

SCHEDULES

FIRST SCHEDULE

Regs. 3 (2), 4 (2)

REQUIREMENTS FOR REGULAR GRADE PETROL

<i>Property</i>	<i>Limit</i>	<i>Test Method</i>
Research octane number	91.0 minimum	ASTM D 2699
Motor octane number	82.0 minimum	ASTM D 2700
Colour	Purple/bronze	Visual
Percentage volume evaporated at 70 degrees Celsius (E 70)	25 minimum 45 maximum	} ASTM D 86
Percentage volume evaporated at 100 degrees Celsius (E 100)	45 minimum 67 maximum	
Percentage volume evaporated at 180 degrees Celsius (E 180)	90 minimum	ASTM D 86
End point (degrees Celsius)	220 maximum	ASTM D 86
Residue (percentage volume)	2 maximum	ASTM D 86
Flexible volatility index	77.5 minimum	} ASTM D 323 and
[RVP (kPa) + (0.7 × E 70)] ¹	115.0 maximum	
Copper strip corrosion (2 hours at 100 degrees Celsius)	Class 1 maximum	ASTM D 130
Sulphur (percentage mass)	0.05 maximum	ASTM D 1266
Existent gum (solvent washed) (mg/100ml)	5 maximum	ASTM D 381
Oxidation stability induction period (minutes)	240 minimum	ASTM D 525
Lead (grams per litre)	0.013 maximum	ASTM D 3116
Benzene (percentage mass)	5 maximum	DIN 51 413-02 or ASTM D 3606
Oxygenates (percentage mass) ²	0.1 maximum	DIN 51 413-01

¹ Specifications cover broad range of summer and winter grades.² Does not apply where the added oxygenate is methyl tertiary butyl ether (MTBE). Up to 11 percent volume MTBE may be added.

SECOND SCHEDULE

Regs. 3 (3), 4 (3)

REQUIREMENTS FOR PREMIUM GRADE PETROL

<i>Property</i>	<i>Limit</i>	<i>Test Method</i>
Research octane number	95.0 minimum	ASTM D 2699
Motor octane number	85.0 minimum	ASTM D 2700
Colour	Yellow	Visual
Percentage volume evaporated at 70 degrees Celsius (E 70)	25 minimum 45 maximum	} ASTM D 86
Percentage volume evaporated at 100 degrees Celsius (E 100)	45 minimum 67 maximum	
Percentage volume evaporated at 180 degrees Celsius (E 180)	90 minimum	ASTM D 86
End point (degrees Celsius)	220 maximum	ASTM D 86
Residue (percentage volume)	2 maximum	ASTM D 86
Flexible volatility index	77.5 minimum	} ASTM D 323 and
[RVP (kPa) + (0.7 × E 70)] ¹	115.0 maximum	
Copper strip corrosion (2 hours at 100 degrees Celsius)	Class 1 maximum	ASTM D 130
Sulphur (percentage mass)	0.05 maximum	ASTM D 1266
Existent gum (solvent washed) (mg/100ml)	5 maximum	ASTM D 381
Oxidation stability induction period (minutes)	240 minimum	ASTM D 525
Lead (grams per litre)	0.013 maximum	ASTM D 3116

SECOND SCHEDULE—*continued*REQUIREMENTS FOR PREMIUM GRADE PETROL—*continued*

<i>Property</i>	<i>Limit</i>	<i>Test Method</i>
Benzene (percentage mass)	5 maximum	DIN 51 413-02 or ASTM D 3606
Oxygenates (percentage mass) ²	0.1 maximum	DIN 51 413-01

¹ Specifications cover broad range of summer and winter grades.

² Does not apply where the added oxygenate is methyl tertiary butyl ether (MTBE). Up to 11 percent volume MTBE may be added.

Regs. 3 (4), 4 (4)

THIRD SCHEDULE
REQUIREMENTS FOR DIESEL

<i>Property</i>	<i>Limit</i>	<i>Test Method</i>
Density at 15 degrees Celsius (kg per litre)	0.810 minimum 0.860 maximum	} ASTM D 1298
Appearance at 15 degrees Celsius	Clear and bright	
Colour (ASTM colour)	3.0 maximum	ASTM D 4176(B)
Cetane number <i>or</i>	45 minimum	ASTM D 1500
Cetane index	47 minimum	ASTM D 613
Cloud point (degrees Celsius) ¹ —Summer	4 maximum	ASTM D 976
Cloud point or Cold filter plugging point (CFPP) (degrees Celsius) ¹ —Winter	-6 maximum	ASTM D 2500
Viscosity (centistokes at 40 degrees Celsius)	1.50 minimum 5.00 maximum	ASTM D 2500 or IP 309
Flash point (degrees Celsius)	61 minimum	} ASTM D 445
Sulphur (percentage mass) ²	0.80 maximum	
Copper strip corrosion (3 hours at 100 degrees Celsius)	Class 1 maximum	ASTM D 93
Ash (percentage mass)	0.01 maximum	IP 242
Carbon residue—Ramsbottom on 10 percent volume residuum (percentage mass)	0.20 maximum	ASTM D 130
Distillation—85 percent volume recovered to (degrees Celsius)	350 maximum	ASTM D 482
		ASTM D 524
		ASTM D 86

¹ Applies at time of manufacture in New Zealand or, for imports, date of discharge into port storage at a New Zealand port.

Summer: 1 September to last day of February.

Winter: 1 March to 31 August.

Sales for marine use may be summer grade at any time of the year.

² The limit for sulphur shall not apply to sale for marine use.

MARIE SHROFF,
Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations consolidate and amend the Ministry of Energy (Petroleum Products Specifications) Regulations 1988 and its amendments.

They specify technical requirements to be met by petroleum fuels distributed in New Zealand.

The substantive changes implemented by these regulations are as follows:

- (a) With effect from 1 January 1996, it will be illegal for wholesalers to add lead to petrol imported into New Zealand, or refined in New Zealand; and
- (b) With effect from 1 October 1996, it will be illegal to supply, or make available for supply, leaded petrol.

Issued under the authority of the Acts and Regulations Publication Act 1989.
Date of notification in *Gazette*: 25 November 1995.
These regulations are administered in the Ministry of Commerce.