REGULATION

OF THE MINISTER FOR CLIMATE AND THE ENVIRONMENT¹⁾

of ... 2024

on quality requirements for liquid fuels 2), 3)

Pursuant to Article 3(2)(1) of the Act of 25 August 2006 on the system for monitoring and controlling fuel quality (Journal of Laws 2023, item 846 and 1681), the following is hereby decreed:

§ 1. Quality specifications for liquid fuels:

- 1) petrol with maximum oxygen content of up to 3.7 % (m/m), falling within CN codes 2710 12 45 and 2710 12 49 and used in particular in vehicles and recreational craft, equipped with positive-ignition engines, is defined under Annex 1 to the Regulation;
- 2) petrol with maximum oxygen quantity of up to 2.7 % (m/m), falling within CN codes 2710 12 45 and 2710 12 49 and used and used in particular in vehicles and recreational craft, equipped with positive-ignition engines, is defined under Annex 2 to the Regulation;

¹ The Minister for Climate and the Environment heads the government departments for energy and climate pursuant to§ 1(2)(1) and (2) of the Regulation of the Prime Minister for 19 December 2023 on the detailed scope of activities of the Minister for Climate and the Environment (Journal of Laws, item 2726).

This Regulation implements Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC (OJ EU L 350, 28.12.1998, p. 58 — Special edition in Polish, chapter 13, vol. 23, p. 182, OJ EU L 287, 14.11.2000, p. 46 — Polish special edition, chapter 13, Volume 26, p. 65, OJ EU L 76, 22.3.2003, p. 10 — Special edition in Polish, chapter 13, Vol. 31, p. 160, OJ EU L 284, 31.10.2003, p. 1 — Special edition in Polish, chapter 1, Volume 4, p. 447, OJ EU L 140, 5.6.2009, p. 88, OJ EU L 147, 2.6.2011, p. 15, OJ EU L 170, 11.6.2014, p. 62, OJ EU L 116, 7.5.2015, p. 25, OJ EU L 239, 15.9.2015, p. 1, OJ EU L 328, 21.12.2018, p. 1, OJ EU L 261, 14.10.2019, p. 100, OJ EU L 2023/2413, 31.10.2023 and OJ EU L 90085, 7.2.2024).

- 3) diesel fuel, falling with codes CN 2710 19 43 and 2710 20 11 and used in particular in vehicles, including agricultural tractors, non-road mobile machinery and recreational craft, equipped with compression-ignition vehicles, is defined under Annex 3 to the Regulation.
 - § 2. This Regulation shall enter into force 14 days after its publication.⁴⁾

MINISTER FOR CLIMATE AND THE ENVIRONMENT

⁴ This Regulation was preceded by the Regulation of the Minister for Economy of 15 October 2015 on quality requirements for liquid fuels (Journal of Laws of 2023, item 1314) which, in accordance with Article 32 of the Act of 11 February 2016 amending the Act on government administration departments and certain other acts (Journal of Laws, items 266 and 1592), shall expire on the date of entry into force of this Regulation.

QUALITY REQUIREMENTS FOR PETROL WITH MAXIMUM OXYGEN CONTENT OF UP TO 3.7 % (M/M), FALLING WITHIN CN CODES 2710 12 45 AND 2710 12 49, USED IN PARTICULAR IN VEHICLES AND RECREATIONAL CRAFT EQUIPPED WITH POSITIVE-IGNITION ENGINES¹⁾

Annex 1

Nr	Parameter	Unit	Ran	$ge^{2)}$	
	i arametei	Ome	minimum	maximum	
1	Research Octane Number,				
	RON): ³⁾				
	- unleaded petrol 95		95.0		
	- unleaded petrol 98		98.0		
2	Motor Octane Number,				
	MON: ³⁾				
	- unleaded petrol 95		85.0	_	
	- unleaded petrol 98		88.0	_	
3	Lead content	mg/l	_	5.0	
4	Density (at a temperature of	kg/m³	720.0	775.0	
	15 °C)	Kg/III	720.0	773.0	
5	Sulphur content	mg/kg	_	10.0	
6	Manganese content	mg/l	_	2.0	
7	Oxidising stability	min.	360		
8	Resin content present(after	mg/100		5	
	solvent washing)	ml		3	
9	Test method for copper plate				
	strip corrosion (3h at a	class	Clas	ss 1	
	temperature of 50 °C)				
10	Appearance		bright and	transparent	
11	Hydrocarbon content of the				
	following type:				
	- olefins	% (V/V)	_	18.0	
	- aromas	% (V/V)	_	35.0	

12	Benzene content	% (V/V)		_			1.00	
13	Oxygen content	% (m/m)		_			3.7	
14	Oxygen compound content:							
	- methanol, stabiliser shall be	% (V/V)		_		3.0		
	added							
	- ethanol, stabiliser may be	% (V/V)		_		10.0		
	required							
	- isopropyl alcohol	% (V/V)		_			12.0	
	- tert-butyl alcohol	% (V/V)		_			15.0	
	- isobutyl alcohol	% (V/V)		_			15.0	
	- ethers (with 5 or more	% (V/V)					22.0	
	carbon atoms)							
	- other oxygen compounds ⁴⁾	% (V/V)		_		15.0		
15	Vapour pressure (VP)	kPa	45.0 ⁵⁾	45.06	$60.0^{7)}$	60.05)	90.06	90.07)
	(DVPE method)	III u	13.0	12.0		00.0	70.0	0.0
16	Distillation:				•			
	- percentage evaporated up to	% (V/V)	22.05)	22.0^{6}	24.07)	$50.0^{5)}$	52.06	52.07)
	the temperature of 70 °C,							
	E70							
	- percentage evaporated up to	% (V/V)		46.0		72.0		
	the temperature of 100 °C,							
	E100							
	- percentage evaporated up to	% (V/V)		75.0				
	the temperature of 150 °C,							
	E150							
17	— end of distillation	°C					210	
	temperature							
18	— residue after distillation	% (V/V)	_		2			
19	Volatility Index, VLI (VLI =						1164 ⁶⁾	
	10 DVPE + 7 E70)							

- ¹⁾ Developed on the basis of the PN-EN standard 228+A1:2017-06 Automotive fuels Unleaded petrol Requirements and test methods.
- ²⁾ Values quoted in the specifications are 'true values.' When determining their limit values, the conditions of the PN-EN ISO 4259-1 standard were taken into account, whereby a minimum difference of 2R above zero was taken into account when determining the minimum value (where R is the reproducibility). The results of individual measurements shall be interpreted in accordance with the criteria under the PN-EN ISO 4259-2 standard.
- The final RON and MON values are calculated by subtracting the correction factor k = 0.2 from the result on the MON and RON markings by the appropriate method.
- 4) Other alcohols with one hydroxyl group and ethers with final boiling temperature not higher than 210 °C.
- For the summer period from 1 May 30 September.
- ⁶⁾ For the transition period from 1 March 30 April and 1 October 31 October.
- ⁷⁾ For the winter period from 1 November end of February.

QUALITY REQUIREMENTS FOR PETROL WITH MAXIMUM OXYGEN CONTENT OF UP TO 2.7 % (M/M) FALLING WITHIN CN CODES OF 2710 12 45 AND 2710 12 49, USED IN PARTICULAR IN VEHICLES AND RECREATIONAL CRAFT EQUIPPED WITH POSITIVE-IGNITION ENGINES¹⁾

Nr	Parameter	Unit	Ra	Range ²⁾		
	Tarameter	Oint .	minimum	maximum		
1	Research Octane					
	Number, RON: ³⁾					
	- unleaded petrol 95		95.0	_		
	- unleaded petrol 98		98.0	_		
2	Motor Octane Number,					
	MON: ³⁾					
	- unleaded petrol 95		85.0	_		
	- unleaded petrol 98		88.0	_		
3	Lead content	mg/l	_	5.0		
4	Density (at a temperature	kg/m³	720.0	775.0		
	of 15 °C)	Kg/III	720.0	775.0		
5	Sulphur content	mg/kg	_	10.0		
6	Manganese content	mg/l	_	2.0		
7	Oxidising stability	min.	360	_		
8	Resin content present	mg/100 ml		5		
	(after solvent washing)	mg/100 mi		3		
9	Test method for copper					
	plate strip corrosion (3h	class	Cla	ass 1		
	at the temperature of	010.55		Cluss 1		
	50 °C)					
10	Appearance		bright and	transparent		
11	Hydrocarbon content of					
	the following type:					
	- olefins	% (V/V)	_	18.0		
	- aromas	% (V/V)	_	35.0		

12	Benzene content	% (V/V)					1.00	
13	Oxygen content	% (m/m)	_			2.7		
14	Oxygen compound							
	content:							
	- methanol, stabiliser	% (V/V)					3.0	
	shall be added							
	- ethanol, stabiliser may	% (V/V)				5.0		
	be required							
	- isopropyl alcohol	% (V/V)				Volum	ne conten	t of the
	- tert-butyl alcohol	% (V/V)				comp	posing pr	roduct
	- isobutyl alcohol	% (V/V)				limited	l by a ma	ximum
	- ethers (with 5 or more	% (V/V)				oxyg	gen conte	ent of
	carbon atoms)					2.	.7 % (m/s	m)
	- other oxygen	% (V/V)						
	compounds ⁴⁾							
15	Vapour pressure (VP)	kPa	45.05)	45.06	60.07)	60.05)	90.069	90.07)
	(DVPE method)	Ki u	13.0	13.0	00.0	00.0	70.0	70.0
16	Distillation:			•				
	- percentage evaporated	% (V/V)	20.05)	20.06)	$22.0^{7)}$	48.05)	50.069	50.07)
	up to the temperature of							
	70 °C, E70							
	- percentage evaporated	% (V/V)		46.0	•		71.0	
	up to the temperature of							
	100 °C, E100							
	- percentage evaporated	% (V/V)		75.0			_	
	up to the temperature of							
	150 °C, E150							
17	— end of distillation	°C					210	
	temperature							
18	— residue after	% (V/V)					2	
	distillation							

19	Volatility Index, VLI	_	11506)
	(VLI = 10 DVPE + 7		
	E70)		

- Developed on the basis of PN-EN 228+A1:2017-06 Automotive fuels Unleaded petrol Requirements and test methods.
- Values quoted in the specifications are 'true values.' When determining their limit values, the conditions of the PN-EN ISO 4259-1 standard were taken into account, whereby a minimum difference of 2R above zero was taken into account when determining the minimum value (where R is the reproducibility). The results of individual measurements shall be interpreted in accordance with the criteria under the PN-EN ISO 4259-2 standard.
- The final RON and MON values are calculated by subtracting the correction factor k = 0.2 from the result on the MON and RON markings by the appropriate method.
- ⁴⁾ Other alcohols with one hydroxyl group and ethers with final boiling temperature not higher than 210 °C.
- ⁵⁾ For the summer period from 1 May 30 September.
- ⁶⁾ For the transition period from 1 March 30 April and 1 October 31 October.
- ⁷⁾ For the winter period from 1 November end of February.

Annex 3

QUALITY REQUIREMENTS FOR DIESEL FUEL FALLING WITHIN CN CODES 2710 19 43 AND 2710 20 11 USED IN PARTICULAR IN VEHICLES, INCLUDING AGRICULTURAL TRACTORS, NON-ROAD MOBILE MACHINERY, AND RECREATIONAL CRAFT EQUIPPED WITH COMPRESSION-IGNITION ENGINES¹⁾

Nr					Diesel with		
			'Stand	ard ' diesel	'improv	ed low-	
	Parameter	Unit			temperature properties'		
			r	ange ²⁾	range ²⁾		
			minimum maximum		minimum	maximum	
1	Cetane number		51.0	_	51.0		
2	Cetane index		46.0	_	46.0		
3	Density at a temperature	kg/m³	820.03)	845.0	800.0	840.0	
	of 15 °C	кулп	815,04,5)	045.0	000.0	040.0	
4	Content of polycyclic	% (m/m)		8.0		9.0	
	aromatic hydrocarbons	70 (III/III)		0.0	— 8.0		
5	Sulphur content	mg/kg	_	10.0	_	10.0	
6	Manganese content	mg/l	_	2.0	_	2.0	
7	Flash point	°C	above		above 55.0		
	i iasii poiit	J	55.0				
8	Carbon residue ⁶⁾						
	(with 10 % distillation	% (m/m)		0.30	_	0.30	
	residue)						
9	Ash content	% (m/m)	_	0.010	_	0.010	
10	Water content	% (m/m)	_	0.020	_	0.020	
11	Pollution content	mg/kg	_	24	_	24	
12	Test method for copper						
	corrosion (3h at a	class	Class 1		Clas	ss 1	
	temperature of 50 °C)						
13	Fatty Acid Methyl Ester	% (V/V)		7.0		7.0	
	(FAME) content	/0 (v / v)		/ . U		7.0	

14	Oxidative stability ⁷⁾	g/m³		25	_	25
15	Oxidative stability for	h	20.0	_	20.0	
	diesel containing more		or		or	
	than 2.0 % (V/V) FAME ⁷⁾	min.	60.0	_	60.0	_
16	Lubricity, wear scar					
	diameter (WSD) at	M		460		460
	60 °C					
17	Viscosity at a	mm²/s	2.000	4.500	1.500	4.000
	temperature of 40 °C	111111 / 5	2.000	4.300	1.300	4.000
18	Fractional					
	composition: ⁸⁾					
	— distilled up to the	0/ (37/37)		< 65		
	temperature of 250 °C	% (V/V)		< 05		
	— distilled up to the	% (V/V)	85			
	temperature of 350 °C	/0 (V/V)	0.5	_		
	95 % (V/V) distilled up	°C		360.0		
	to temperature of			300.0		
	— distilled up to the	% (V/V)				10.0
	temperature of 180 °C	/0 (V/V)		_		10.0
	— distilled up to the	% (V/V)			95.0	
	temperature of 340 °C	/º (v/v)		_	93.0	_
19	Cold Filter Plugging	°C		$0^{3)}$ $-10^{4)}$ $-20^{5)}$		-32
	Point (CFPP)			0 -10 -20		-32
20	Cloud point	°C	_	_	_	-22

Developed on the basis of PN-EN 590:2022-08 Automotive fuels — Diesel — Requirements and test methods.

²⁾ Values quoted in the specifications are 'true values.' When determining their limit values, the conditions of the PN-EN ISO 4259-1 standard were taken into account, whereby a minimum difference of 2R above zero was taken into account when determining the minimum value (where R is the reproducibility). The results of individual measurements shall be interpreted in accordance with the criteria under the PN-EN ISO 4259-2 standard.

³⁾ For the summer period spanning 16 April to 30 September.

For the transition period spanning 1 March to 15 April and 1 October to 15 November.

⁵⁾ For the winter period from 16 November — end of February.

The carbon residue value limit is defined for the product prior to the inclusion of additive ensuring a higher cetane number, provided that it is used. If the final commercial fuel exceeds the limit value, the presence of nitrate-containing additives must be checked in accordance with PN-EN ISO 13759. If the existence of an additive ensuring a higher cetane number is noted, the carbon residue value limit is not binding. The use of

- additives does not relieve the fuel producer from the need to maintain the required maximum value of $0.30\,\%$ (m/m) of carbon residue prior to the inclusion of additives.
- The oxidative stability requirement according to PN-EN ISO 12205 applies to diesel regardless of FAME content. For diesel fuel containing more than 2.0 % (V/V) of FAME, an additional oxidative stability test requirement specified in PN-EN 15751 or PN-EN 16091 is required. In disputable cases, PN-EN 15751 shall be used.
- ⁸⁾ The requirements for distillate volumes up to 250 °C and up to 350 °C for diesel fuels are in line with the EU Common Customs Tariff.