



# QUALITY DATA FOR PETROL AND DIESEL FUEL IN ICELAND IN 2009

## 1. Background

With reference to Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel, Article 8(3) and Commission decision C (2002) 508 of 18 February 2002 we hereby send the report on the quality data of petrol and autodiesel fuels used on the Icelandic market in the year 2009.

## 2. Details of those compiling the fuel quality monitoring report

Reporting year	2009
Country	Iceland
Date report completed	5. December 2011
Institute responsible for report	The Environment Agency of Iceland
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## 3. Short description of the fuel grades and the distribution of fuels in Iceland.

In Iceland the main fuel grades are 95 octane (Mogas 95/EN228) and auto diesel. Approximately 95% of all gasoline sold is Mogas95/EN228, 5% is Mogas98/EN228.

There are four main oil companies in Iceland; Atlantsoil, Shell, Olis and N1. In 2009 the total amount of fuel delivered to road transport was 271,7 kilotonnes and the distribution of fuel was covered from 38 depots that are spread around the country.

## 4. Description of fuel quality monitoring system

In Iceland, each fuel batch delivery is controlled by Fjölver surveyor and fuel inspection. The testing results of the fuel products are directly compared with the agreed product. The data of delivered fuel batches are reported to the competent authority; The Environment Agency of Iceland.

## 5. Total sales of petrol and diesel in 2009

Fuel grade	National sales total (kilotonnes)
Unleaded petrol (95 ≤ RON ≤ 98), Mogas 95/98/EN228	157,2
Diesel fuel <sup>(1)</sup> (Road transport only)	114,5
<sup>(1)</sup> As specified in Annex II of Directive 98/70/EC.	

## 6. Definition of summer period for petrol volatility

Due to low ambient summer temperatures in Iceland, the summer period is from 1 June to 31 August and the maximum vapour pressure is 70 kPa.

Summer period (defined for petrol volatility)	1 June - 31 August
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## 7. Quality data for petrol

The summary report for the quality monitoring data for petrol collected in year 2009 is shown below.

Parameter	Unit	Analytical and statistical results				Limiting value (l)			
						National specification, if any		According to 98/70/EB	
		No. of samples	Minimum	Maximum	Mean	Minimum	Maximum	Minimum	Maximum
Density	g/l	45	0,7208	0,7465	0,732				
Research octane No	—	54	95	98,9	95,4			95	—
Motor octane No	—	54	85	87	85,6			85	
Vapour pressure, DVPE	kPa	59	67,4	100	89,7	*	*	*	*
Distillation:									
— evaporated at 100 °C	%(v/v)	59	56,1	70,9	64,5			46	—
— evaporated at 150 °C	%(v/v)	59	88,4	96,3	91,9			75	—
Hydrocarbon analysis:									
— olefin	%(v/v)	54	1,7	17,6	7,5		35		18
— aromatics	%(v/v)	54	20,5	33,8	27,5				35
— benzene	%(v/v)	54	0,59	0,98	0,8				1
Oxygen content	%(m/m)	54	0,6	2,6	1,7			—	3,7
Oxygenates:									
— Methanol	%(v/v)	54	<0,5	<=0,5				—	3
— Ethanol	%(v/v)	54	<0,5	<=0,5				—	10
— Iso-propyl alcohol	%(v/v)	54	<0,5	<=0,5				—	12
— Tert-butyl alcohol	%(v/v)	54	<0,5	<=0,5				—	15
— Iso-butyl alcohol	%(v/v)	54	<0,5	<=0,5				—	15
— Ethers with five or more carbon atoms per molecule	%(v/v)	40	3,2	14,3	8,7			—	22
— other oxygenates	%(v/v)	54	<0,5	<=0,5				—	15
Sulphur content	mg/kg	59	4,5	10	5,9		10	—	10
Lead content	g/l	54	0,003	<=3				—	0,005

(1) The limiting values are 'true values' and were established according to the procedures for limit setting in EN ISO 4259:1995.

\* Iceland is an outermost region with a maximum vapour pressure of 70 kPa during the summer time.

Number of samples in month					Total	59	
January	4	April	4	July	4	October	4
February	2	May	5	August	9	November	2
March	6	June	4	September	5	December	10





## 8. Quality data for diesel fuel

The summary report for the quality monitoring data for diesel fuel in year 2009 is shown below.

Parameter	Unit	Analytical and statistical results				Limiting value (l)			
						National specifications		According to 98/70/EC	
		No. Of samples	Minimum	Maximum	Mean	Lágmark	Hámark	Lágmark	Hámark
Cetane No	—	44	>49	53,8	39,1			51	—
Density at 15 °C	kg/m <sup>3</sup>	44	825	844	835			—	845
Distillation — 95% point	°C	39	313,3	358,4	336,4			—	360
Polycyclic aromatic hydrocarbons	%(m/m)	43	0,7	4	1,5			—	8
Sulphur content	mg/kg	44	<3	10	4,9		10	—	10

Number of samples in month						Total	44
January	4	April	7	July	4	October	3
February	1	May	5	August	6	November	1
March	5	June	4	September	4	December	0

