



EFFECTIVE CARE FOR YOUR CARS

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ECO GAS[®]

REDUCES CONSUMPTION

INCREASES DRIVING DISTANCE

GREASES PUMPS AND INJECTION NOZZLES

RELEASES DEAD PARTS IN OLDER CARS



www.eco-gas.cz



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REPORT No 10/01475

APPLICANT: **ECO GAS**
2 rue du Buisson aux Fraises
91300 Massy

TEST PURPOSE: **Analysis of SP95 unleaded petrol, with addition of 0.025% of liquid additive "Eco Gas Essence"**

Person in charge: **Jean-Luc EUSTACHE**

Didier PINGAL
Unit head, Emissions & Energetics

Montlhéry on 18 February 2010

Serge FICHEU
Department manager for Environment

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This test report contains 3 pages and 2 annexes.

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1. PURPOSE

The main objective of the programme was to verify whether the commercially available fuel conforms to the specified parameters when treated with the "Eco Gas Essence" fuel additive.

The fuel is SP95 unleaded petrol, collected from UTAC's own petrol dispenser. The reference petrol conforms to the environmental specifications applicable to commercially available fuels for vehicles powered with a spark ignition engine (Directive 2009/30/EC).

10 litres of SP95 unleaded petrol were treated with 0.025% of "Eco Gas Essence" liquid additive.

The additive application was ensured by UTAC staff in the presence of the client commissioning the test.

2. PROGRAMME

The sample analysis was performed by SGS (site in Longjumeau) in order to verify all specifications of the standard NF EN 228, CSR 1-2-01, dated 1 July 2009, for unleaded petrol with octane number 95.

3. FINDINGS

The detailed analysis log is shown in Annex 2.

4. CONCLUSION

The test specific parameters of the sample comply to the specifications of NF EN 228, CSR 1-2-01, dated 1 July 2009, for unleaded petrol with octane number 95.



DOCUMENT No. 10/01475
Annex 1

ANNEX 1

"Eco Gas Essence" liquid additive



ECO GAS™ Stabilizer for gasoline

Application: pour ECO GAS right into the refueling pistol first, put the pistol to the tank and fill it with fuel.

250 ml
(dilution ratio 1:4000)

Dosage

Fuel	ECO GAS
20 L	5 ml
40 L	10 ml
60 L	15 ml
80 L	20 ml
100 L	25 ml
200 L	2 x 25 ml
300 L	3 x 25 ml
400 L	4 x 25 ml

Squeeze the bottle to fill dosage container with needed amount of ECO GAS (see the dosage table) and pour it into gasoline tank.

TIP! To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

250 ml pack is suitable for preparation of 1000L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

250 ml Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).

ECO GAS™ Stabilizer for gasoline

1 L
(dilution ratio 1:4000)

Dosage

Fuel	ECO GAS
40 L	10 ml
80 L	20 ml
100 L	25 ml
200 L	50 ml
300 L	75 ml
400 L	100 ml

Application: squeeze the bottle to fill dosage container with needed amount of ECO GAS (see the dosage table) and pour it into gasoline tank.

TIP! Pour ECO GAS right into the refueling pistol first, put the pistol to the tank and fill it with fuel. To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

1 litre pack is suitable for preparation of 4000L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

1000 ml Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).

ECO GAS™ Stabilizer for gasoline

15 ml
(dilution ratio 1:4000)

Application: pour ECO GAS only right into the refueling pistol first, put the pistol to the tank and fill it with fuel!

ECO GAS apply preferably before every filling tank.

TIP! To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

15 ml pack is suitable for preparation of 60L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

15 ml Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).



DOCUMENT No. 10/01475
Annex 1

**ECO GAS PETROL
REDUCES CONSUMPTION AND POLLUTANT EMISSIONS**

ECO GAS increases fuel efficiency: Up to 100 km more when filling a full tank.

Text in the container label photo

It reduces the most harmful pollutants considerably: particles, carbon monoxide and nitrogen oxides. Eco Gas was designed for use with all petrol combustion engines (cars, motorcycles...) and to conform to all measures preventing air pollution.

How to use: Every time you fill the fuel, shake the container and pour a dose into the tank or the dispenser nozzle.

Dosage: A 100 ml bottle will last for 400 litres of gasoline, which means 2.5 ml of ECO GAS per 10 litres of fuel, or 5 ml per 20 litres, or 10 ml per 40 litres...23, rue Scheffer - 75116 Paris - 01 45 53 18 74

Ref RD0100P

Made in EU

250 ml e

Contains hydrocarbons. Inflammable. May result in harm to lungs when swallowed.- May result in long-term undesirable effects for a water environment.- Do not inhale the vapour.- Avoid contact with the skin.- When swallowed, consult a physician immediately, showing them the container or label.



DOCUMENT No. 10/01475
Annex 1

ANNEX 2

**Analysis report for SP95 unleaded petrol
with addition of 0.025%
of "Eco Gas Essence" liquid additive**

ANALYSES	STANDARDS/METHODS	UNIT	FINDINGS
COLOUR ASPECT	Visually		CLEAR YELLOW
DENSITY AT 15 °C	NF EN ISO 12185/ASTM D 4052	kg/m ³	742.5
VOLATILITY RATIO - calculation	EN 228		970
SULFUR IN PETROL	NF EN ISO 20846 /ASTM D 5453	mg/kg	8.2.2014
SULFUR Mercaptans/H ₂ S Mercaptans with H ₂ S extracted Mercaptans with H ₂ S not extracted H ₂ S		% (m/m)	< 0.0001
COPPER CORROSION 3 hours at 50 °C	NF EN ISO 2160 /ASTM D 130		
RESIN before/after rinsing Not rinsed (before rinsing) Rinsed (after rinsing)	NF EN ISO 6246 /ASTM D 381	mg/100 ml	28 <1
Motor octane number (MON)	NF EN ISO 5163/ASTM D 2700		85.8
Research octane number (RON)	NF EN ISO 5164 / ASTM D 2699		96.7
LEAD IN PETROL	NF EN 237 / ASTM D 3237	mg/l	<2
OXIDATION STABILITY	NF EN ISO 7536 / ASTM D 525	min	>960
BENZENE	NF EN 238 / ASTM D 4053		

ANALYSES	STANDARDS/METHODS	UNIT	FINDINGS
HYDROCARBON FAMILIES + OXYGENATES	NF EN 15553/ASTM D 1319 ; NF EN 1601 (CPG O		
HYDROCARBON FAMILIES			
Without oxygenate correction			
-aromatic			30.5
-ethylene/olefins			13.0
-saturated/paraffinic			56.5
With oxygenate correction			
-aromatic			27.9.2014
-ethylene/olefins			11.9.2014
-saturated/paraffinic			51.7
OXYGENATES			
Methanol			<0.17
Ethanol			4.3
Isopropyl alcohol			0.17
Isobutanol			0.17
Tert-butyl alcohol			<0.17
ETBE			4.2
MTBE			0.17
TAME			0.17
Other ethers at 5 °C or more			<0.17
Other oxygenates			0.17
Oxygen content/% m/m)			1.7

ANALYSES	STANDARDS/METHODS	UNIT	FINDINGS
PETROL DISTILLATION (% of volume vaporization)	NF EN ISO 3405/ASTM D 86	°C	
Starting point			34.0
5%			46.1
10%			50.1
20%			55.1
30%			61.9
40%			75.5
50%			89.9
60%			102.1
70%			113.5
80%			125.5
90%			142.8
95%			156.9
Final point			179.7
% distillation			97.5
% sediment			1.2
% loss			1.3
% volume vaporization at 70 °C			35.2
% volume vaporization at 100 °C			56.9
% volume vaporization at 150 °C			91.9
% volume vaporization at 180 °C			
PRESSURE of petrol vapours	NF EN 13016-1 / ASTM D	kPa	
ASVP (air saturated vapour)	5191		72.4
DVPE (dry vapour pressure equivalent)			66.1



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REPORT No 11/01872

APPLICANT: **ECO GAS**
2 rue du Buisson aux Fraises
91300 Massy

TEST PURPOSE: **Analysis of diesel with addition of 0,025% of "EcoGass Diesel" liquid additive**

Person in charge: **Christophe MARQUIS**

Didier PINGAL
*Department head, Emissions &
Energetics*

Montlhéry on 11 March 2011

Serge FICHEU
*Department manager for
Environment*

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Union technique de l'Automobile, du Motocycle et du Cycle
Simplified joint-stock company with equity of € 6.000.000
VAT REGISTRATION NUMBER: FR 89 438 725 723 - SIREN 438 725 725, Trade
register in Evry
This test report contains 3 pages and 2 annexes.



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Annex 1:	"Eco Gas Diesel" liquid additive
Annex 2:	Analysis of diesel with addition of 0,025% of "Eco Gass Diesel" liquid additive



1. PURPOSE

The main objective of the programme was to verify whether diesel fuel conforms to the specified parameters when treated with the “Eco Gas Essence” fuel additive.

The reference diesel conforms to the environmental specifications applicable to commercially available fuels for vehicles powered with a diesel engine (Directive 2009/30/EC).

2. PROGRAMME

10 litres of diesel were treated with 0.025 % of “Eco Gas Diesel” liquid additive (**refer to Appendix 1**). The additive was applied by UTAC staff. The sample analysis was performed by SGS (site in Longjumeau) in order to verify all specifications of standard NF EN 590 for diesel fuel.

3. FINDINGS

The detailed analysis log is shown in Annex 2.

4. CONCLUSION

The reference parameters of the sample conform to the specifications of standard NF EN 590 for diesel fuel.



DOCUMENT No. 11/01872
Annex 1

ANNEX 1

"Eco Gas Diesel" liquid additive



ECO GAS™ Stabilizer for diesel fuel

Application: pour ECO GAS right into the refueling pistol first, put the pistol to the tank and fill it with fuel.

250 ml
(dilution ratio 1:4000)

Dosage

Fuel	ECO GAS
20 L	5 ml
40 L	10 ml
60 L	15 ml
80 L	20 ml
100 L	25 ml
200 L	2 x 25 ml
300 L	3 x 25 ml
400 L	4 x 25 ml

Squeeze the bottle to fill dosage container with needed amount of ECO GAS (see the dosage table) and pour it into gasoline tank.

TIP! To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

250 ml pack is suitable for preparation of 1000L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

250 ml e Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).

ECO GAS™ Stabilizer for diesel fuel

1 L
(dilution ratio 1:4000)

Dosage

Fuel	ECO GAS
40 L	10 ml
80 L	20 ml
100 L	25 ml
200 L	50 ml
300 L	75 ml
400 L	100 ml

Application: squeeze the bottle to fill dosage container with needed amount of ECO GAS (see the dosage table) and pour it into gasoline tank.

TIP! Pour ECO GAS right into the refueling pistol first, put the pistol to the tank and fill it with fuel.

To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

1 litre pack is suitable for preparation of 4000L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

1000 ml e Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).

ECO GAS™ Stabilizer for diesel fuel

15 ml
(dilution ratio 1:4000)

Application: pour ECO GAS only right into the refueling pistol first, put the pistol to the tank and fill it with fuel!

ECO GAS apply preferably before every filling tank.

TIP! To increase efficiency of using ECO GAS and maximize positive effects, we highly recommended to add ECO GAS every time before filling tank. Reduces emissions and consumption by fuel quality and age of the car (min. -5%).

15 ml pack is suitable for preparation of 60L of fuel!

Supplier: "HARDS" spol. s r.o., Czech Republic
www.eco-gas.cz

15 ml e Produced in EU

Chemistry: Benzaldehyde. Toxic liquid, don't drink! May cause harm to eyes and skin. Keep out of reach of children! Before use, put on gloves to protect your hands. Recycle as toxic material. In case of contact with your eyes or skin, rinse with plenty of water and seek medical help (show this bottle to a doctor).



ECO GAS DIESEL
REDUCES CONSUMPTION AND POLLUTANT EMISSIONS

SUFFICIENT FOR 25 TANKS

Up to 100 km more when filling a full tank.

1 bottle = 120 litres of diesel saved

Text in the container label photo

Dosage		How to use: Every time you fill fuel, add an additive volume proportionate to the fuel volume filled. To dispense, depress the container.
Fuel	ECO GAS	
201	5 ml	
401	10 ml	
601	15 ml	
801	20 ml	

ECO GAS:

Reduces significantly the most hazardous emissions (particles, CO, NOx) and CO2 emissions. It presents no risks for mechanical parts, even if overdosed.

It is effective in all types of diesel engines (TDI, HDI Common rail, Euro 3, Euro 4, Euro 5) and all fuel types (Standard, Premium, biodiesel). It complies with the specifications of the European standard EN 590. It is used by a large number of experts.

The container is sufficient for 1000 litres of diesel, or 25 full fuel tanks with average volume of 40 litres. This stands for an average cut of 12 % in fuel consumption.

More information can be found on our website www.eco-gas.cz

ECO GAS

23, rue Scheffer - 75116 Paris - 01 45 53 18 74

Ref RD00250P

Made in EU

250 ml e

Contains hydrocarbons. Inflammable. May result in harm to lungs when swallowed. May result in long-term undesirable effects for a water environment. Do not inhale the vapour. Avoid contact with the skin. When swallowed, consult a physician immediately, showing them the container or label.



DOCUMENT No. 11/01872
Annex 2

ANNEX 2

**Analysis report for diesel with 0.025 %
of “Eco Gas Diesel” liquid additive**



TEST REPORT

CLIENT	UTAC	Origin	
Documentation no.	1100261LJ	Product	Diesel
Sample no.	ECHANT.AFFEEE1100013	Number	SGC, LJ1101784d
		OGC	
Collected on	17 February 2011		

ANALÝZY	STANDARDS	UNIT	FINDINGS	MINIMUM VALUE	TYPICAL VALUE	THE MAXIMUM VALUE OF	Implementati on
Density at 15 °C	NF EN ISO 12185	kg/m ³	835,1	820,0		845.0	18/02/2011
Automatic distillation (atmospheric pressure)	NF EN ISO 3405						
Obtained at 250 °C		% vol	37,8			<65	28/02/2011
Obtained at 350 °C		% vol	95,4	85			28/02/2011
95° volume obtained at		°C	347,9			360	28/02/2011
Atmospheric pressure		kPa	101,5				28/02/2011
Viscosity at 40 °C	NF EN ISO 3104	mm ² /s	2 495	2,00		4,50	22/02/2011
Sulfur content	NF EN ISO 20 846	mg/kg	7,0			10,0	18/02/2011
Water content	NF EN ISO12937	mg/kg	40			200	23/02/2011
Total contamination	NF EN 12662	mg/kg	<6,0			24	24/02/2011
Ash content	NF EN ISO 6245	% hmotn	< 0,001			0,01	24/02/2011
(*) Cetane number (measured)	NF EN ISO 5165		53,8	51,0			09/03/2011
Cetane number (calculated)	NF EN ISO 4264		52,3	46,0			28/02/2011
Residual carbon (10%)	NF EN ISO 10370	% hmotn	<0,10		známka třída 1	0,30	28002/2011
COPPER CORROSION 3 hours at 50 °C	NF EN ISO 2160		1				03/03/2011
Induction period	NF EN 15751	HOD	>20,0	20			04/03/2011
Temperature	NF EN 15751	X	+ 110				04/03/2011
Flash point Pennsky Martens, Math A	NF EN ISO 2719	X	61,0	>55			08/03/2011
Lubricating capacity	NF EN ISO 12156-1						
Initial air temperature		°C	23,7				24/02/2011
Initial hair humidity		%	42				24/02/2011
Length x		µm	322				24/02/2011
Length y		µm	293				24/02/2011
MWSD		µm	308				24/02/2011
Final air temperature		°C	25,2				24/02/2011
Konečná vlhkost vzduchu		%	39				24/02/2011
AVP			1,24				24/02/2011
WS 1.4		µm	318			460	09/03/2011
Temperature limit for filtration	NF EN 116	°C	-23			-15	23/02/2011
Polyaromatic hydrocarbons	NF EN 12916						
Di-aromatic		% weight	4,0				11/03/2011
Tri-aromatic		% weight	0,3				11/03/2011
HA Poly		% weight	4,3			8,0	11/03/2011
Methyl esters of fatty acids (inter B)	NF EN 14078	% vol	5,4			7,0	25/02/2011
Oxidation stability 16 hours at 95 °C	NF EN ISO 12205						



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Annex 2

Insoluble filterable		g/m3	1				15/02/2011
Insoluble adhesive		g/m3	1				15/02/2011
Total insoluble		g/m3	2				15/02/2011
Filters used			2				15/02/2011

**I CONTROL MY BUDGET
PROTECTING ENVIRONMENT,
IMPROVING PERFORMANCE OF MY COMPANY**



**... WITH ACTIONS THAT ARE
ECONOMIC AND ENVIRONMENTAL**

