Activator for Fuel Economy

GEONE

Gasoline Supplement

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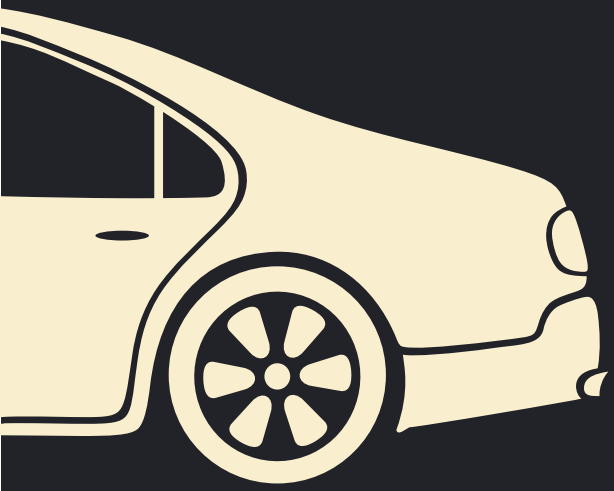
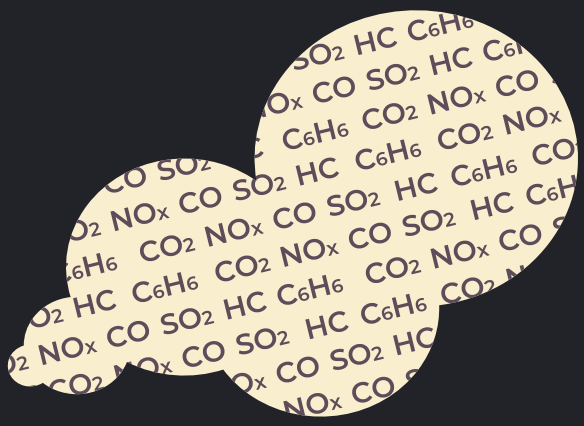


◎Comparison test

Test Item	GEONE Mixed (g/km)	Fuel only (g/km)
CO	0.016	1.020
HC	0.006	0.366
NOx	0.041	0.202
CO_2	171.0	195.0
Figures exclude aromatics	135.0	140.0



Automobiles use gasoline and diesel as fuel. When these are burned to produce energy, the gases emitted contain many chemical substances (pollutants) such as carbon monoxide (CO), hydrocarbon (HC), nitrogen oxides (NOx), and carbon dioxide (CO2).

Monoxide (CO)

CO is emitted when carbon is incompletely burned. When carbon is completely burned, it becomes carbon dioxide. Although it is not a greenhouse gas, it has the property of extending the life of methane, which is a greenhouse gas.

Hydrocarbons (HC)

Hydrocarbons are compounds of carbon and hydrogen that are incompletely combusted. Emitted hydrocarbons undergo a photochemical reaction with nitrogen compounds, producing photochemical oxidants that cause photochemical smog.

Nitrogen oxides (NOx)

NOx are divided into 6 types according to the molecular weight of nitrogen and carbon. The most well-known are NO_2 which is toxic to the human body and destroys the ozone layer, and N_2O which has a strong greenhouse effect.

Carbon dioxide (CO_2)

CO_2 is a common component in the atmosphere, but if its concentration in the atmosphere exceeds 3-4%, it can cause dizziness and headaches, and if it exceeds 7%, it can cause CO2 poisoning which can be fatal in the worst cases.

When comparing emission concentrations with and without GEONE, CO was reduced from 1.02g/km to 0.016g/km, HC was reduced from 0.366g/km to 0.006g/km, NOx was reduced from 0.202g/km to 0.041g/km, and CO2 was reduced from 195.0g/km to 171.0g/km.

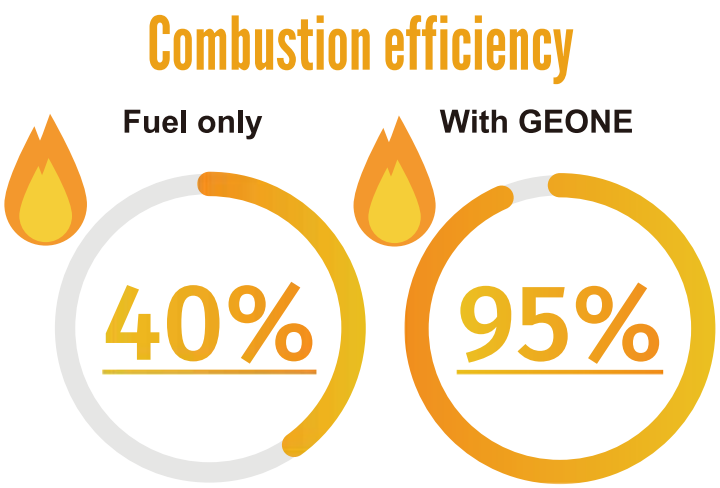
CO	HC	NO_x	CO_2
▼98%	▼98%	▼79%	▼12%

About GEONE

Gasoline, premium gasoline, diesel, etc. are used as fuels to run internal combustion engines in automobiles and other vehicles, but not all of these fuels are completely burned in internal combustion engines. About 60% of these fuels are discarded into the atmosphere without being effectively used as operating energy for internal combustion engines.

GEONE activator, when added to fuel in internal combustion engines, breaks down the hydrocarbons in the fuel components making the fuel more combustible and reaching closer to complete combustion.

Closer to complete combustion reduces the proportion of energy that is discarded without being burned, resulting in improved fuel efficiency.



Only 25 to 30% of the heat produced is used as effective kinetic energy in gasoline engines, and 30 to 40% in diesel engines. The biggest loss is the heat remaining in the exhaust. For gasoline engines, this is as much as 40%. It is no easy task to reduce this figure, but the only way to lower the temperature of exhaust gas without external cooling, such as air or water cooling, is to make the "combustion" itself closer to "perfect combustion."

Fuel economy

The benefits of improved combustion efficiency include increased power, improved fuel economy, reduced exhaust emissions, and reduced carbon buildup inside the engine.

With GEONE = Average fuel economy of 2 to 3 km/ℓ improved

Characteristics

GEONE is a new method of fuel activator that acts directly on the composition of gasoline and changes its composition. While most gasoline additives on the market are designed to clean the inside of engine, GEONE is a gasoline additive and activator that changes the composition of gasoline itself making the fuel more flammable as close to complete combustion as possible.

Promoting complete combustion ultimately leads to improved fuel economy, restored power, improved engine malfunction and cleaner exhaust gases.

Reducing toxic substances

GEONE dramatically improves the octane number of gasoline promoting near-complete combustion.
Near-complete combustion reduces CO and HC which helps prevent air pollution.

High cleaning and coating

GEONE's patented PCT active ingredient not only powerfully breaks down and removes carbon sludge but also provides a coating effect to keep the engine performing at its original level.

Improved fuel economy

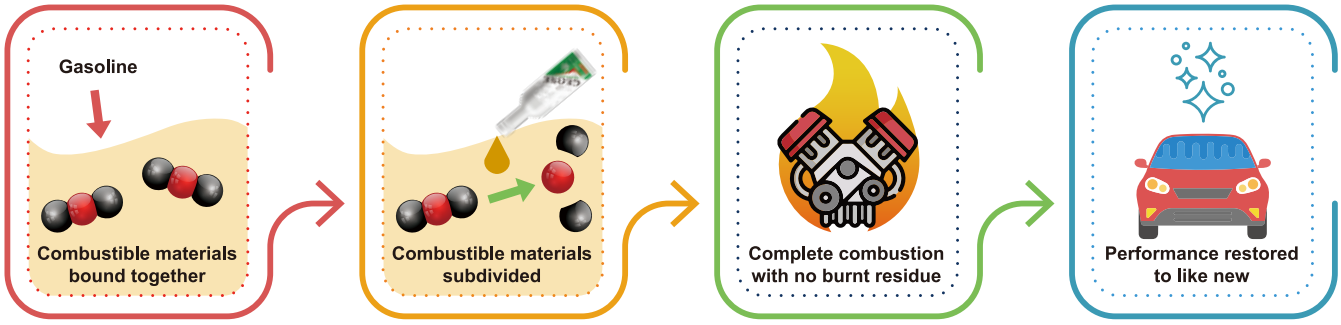
GEONE makes gasoline burn in a near-complete combustion state without waste, so normal power can be obtained even with less combustion ensuring improved fuel economy.

Mechanism

Carbon sludge in the engine cannot be prevented. In particular, combustion residues attached to the injector, fuel injection nozzle, piston head, intake valve and combustion chamber can cause unstable fuel injection, reduced engine performance, exhaust system fouling and corrosion. As the mileage increases, deterioration progresses.

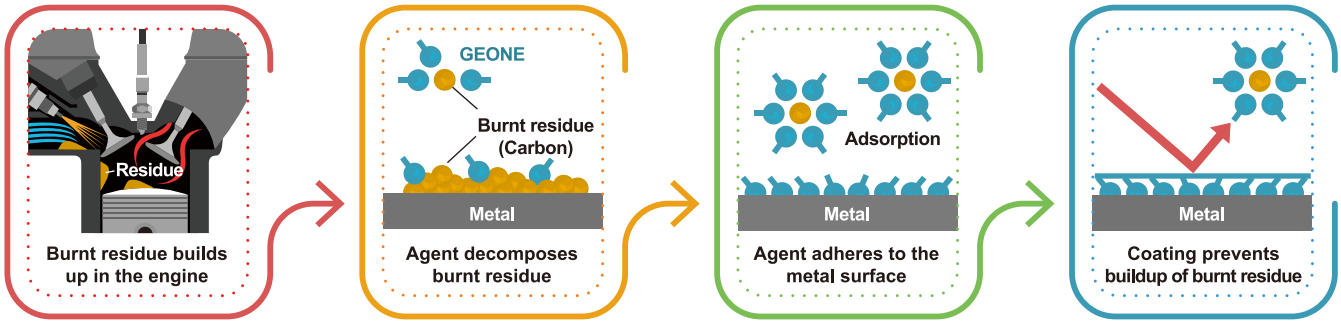
GEONE solves these problems with two effects. The first is to eliminate the original cause of carbon sludge. In other words, GEONE works on the gasoline composition itself making gasoline easier to burn and bringing it closer to complete combustion. The second is to break down and clean the carbon sludge that adheres to the inside of engine, and also to make it difficult for new sludge to adhere to the engine through its coating effect.

Effect 01



GEONE approaches complete combustion by subdividing and mixing combustible substances contained in gasoline to make it more flammable.

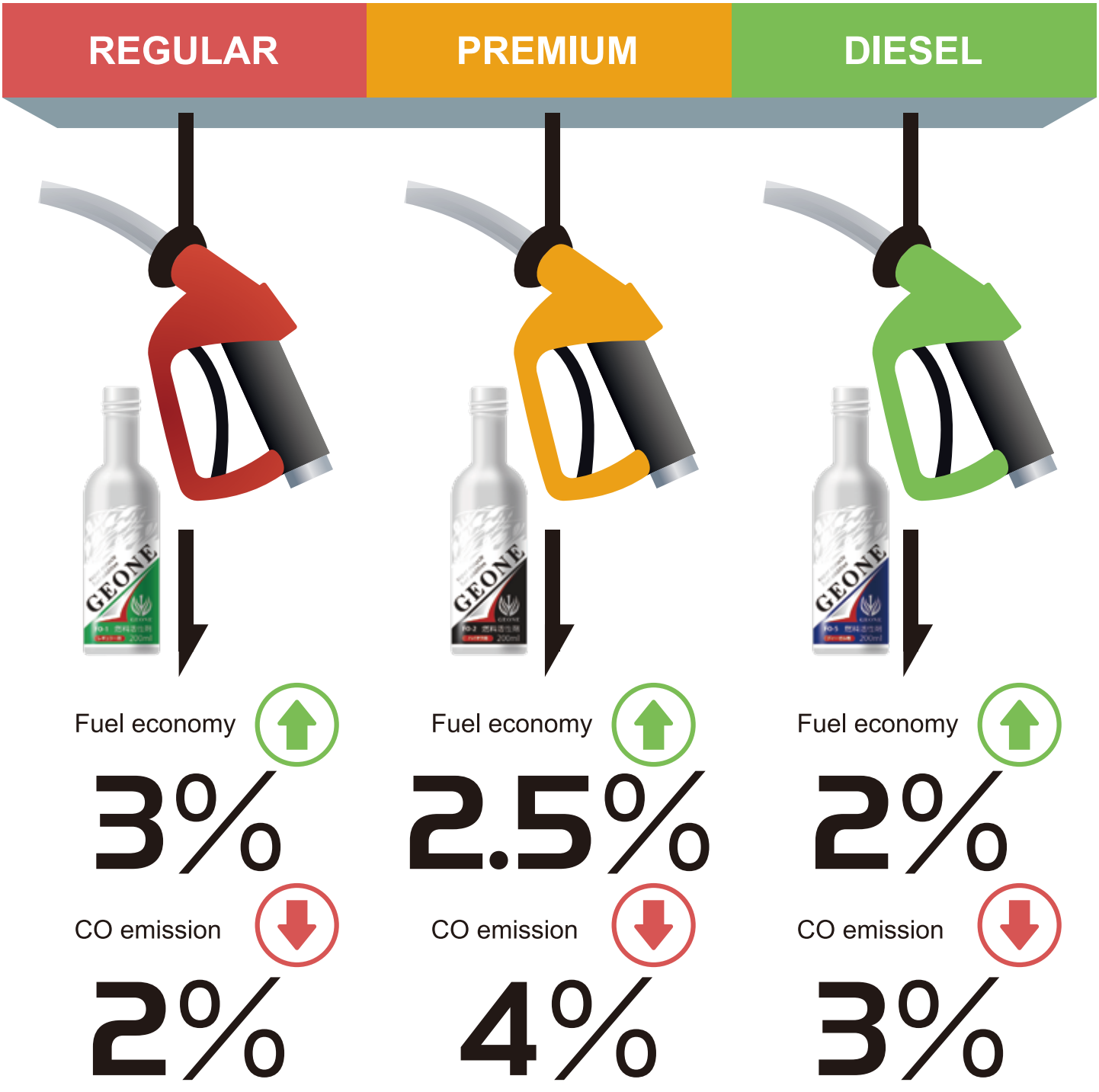
Effect 02



PEA contained in GEONE cleans carbon sludge that has accumulated in the engine. After cleaning, the coating on the metal surface prevents the accumulation of carbon sludge keeping the engine clean.

Improvement

The percentages below show the fuel economy improvement rate and CO reduction rate when adding 200cc of GEONE to 50 liters of gasoline (regular, premium, or diesel respectively) compared to when not adding it.



Full Tank Method

The full tank method is often used to measure actual fuel economy. The full tank method calculates the distance traveled and the amount of fuel consumed starting from the car with a full tank of fuel until filling it up again.

Trip meter mileage ÷ Amount of fuel consumed = Actual fuel economy

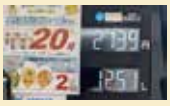
Step 1	Step 2	Step 3	Step 4	Step 5
Fill up the gas tank at a gas station.	Reset the trip meter and start running.	Drive long distances to calculate fuel economy averages.	Record the amount refueled when filling up again.	Fuel economy is calculated by the above formula.

Demonstration test of fuel efficiency improvement

Test Date : August 24, 2024
Vehicle : Nissan SYLPHY
Model : DBA-TB17
Fuel Tank : 52 ℓ

Refueling in Tottori


Refueling in Kobe

Idemitsu Self Sannomiya SS (Kobe) — SANDA IC — YONAGO IC — Apollo Station Self Sakaiminato (Tottori)

Going

Idemitsu Self Sannomiya SS (Kobe) ⇒ Apollo Station Self Sakaiminato (Tottori)
Trip meter mileage: **269.30km**
Amount of fuel consumed: **14.21ℓ**
269.30÷14.21 = 18.95km/ℓ

Return

Apollo Station Self Sakaiminato (Tottori) ⇒ Idemitsu Self Sannomiya SS (Kobe)
Trip meter mileage: **269.90km**
Amount of fuel consumed: **12.51ℓ**
269.90÷12.51 = 21.57km/ℓ

Fuel economy 2.62km/ℓ Up

This means that a full tank of 52 ℓ can run approximately 136 km longer.

Product

Type : F0-1 (Regular)
APPS : For four-and two-wheeled vehicles
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add 1 bottle (200 ㎖) to approx. 30 to 50 liters of gasoline tank capacity.
Volume : 200 ㎖

Type : F0-2 (High octane)
APPS : For four-and two-wheeled vehicles
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add 1 bottle (200 ㎖) to approx. 40 to 60 liters of gasoline tank capacity.
Volume : 200 ㎖

Type : F0-3 (Super high octane)
APPS : For four-and two-wheeled vehicles
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add 1 bottle (400 ㎖) to approx. 50 to 60 liters of gasoline tank capacity.
Volume : 400 ㎖

Type : F0-5 (General vehicle diesel)
APPS : Diesel fuel flammability enhancer
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add 1 bottle (200 ㎖) to approx. 40 to 60 liters of diesel oil tank capacity
Volume : 200 ㎖

Type : F0-6 (Diesel for business vehicles)
APPS : Diesel fuel flammability enhancer
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add one bottle (900ml) of this product to approx. 200-300 liters of diesel fuel
Volume : 900 ㎖

Type : F0-7 (For ships and fishing boats)
APPS : For heavy oil A and diesel fuel
Effects : Acceleration of combustion efficiency
IMP of power and fuel economy
Suppression of toxic substances
COMP : Synthetic PEA
Amount: Add 900ml of fuel oil or diesel fuel based on 300 liters of fuel oil
Volume : 900 ㎖