

## IMPROVE YOUR ENGINE PERFORMANCE



# DAELIM ENTERPRISE

Daelim Enterprise Co. manufactures chemical products for engine care with a 26-year history.

[www.daelimoil.com](http://www.daelimoil.com)

# DAELIM ENTERPRISE

Daelim Enterprise focuses its utmost efforts on helping consumers maintain safe car engine and enjoy riding pleasure and comfort. Daelim Enterprise has been manufacturing and supplying chemical products required for engine care over the last 26 years. The company has gained recognition for its quality from its customers including multinational corporations and local large corporations as quality is the source of its competitiveness as well as pride. We will continue its efforts to satisfy our customers.



## PRODUCTS

ENGINE COATING TREATMENT	FULL SYNTHETIC ENGINE OIL	FUEL ADDITIVES	ADDITIVES FOR COOLING SYSTEM	ETC
PROTECH	MIRATEC	FUEL ADDITIVE	ANTI CORRSION ADDITIVE	AFT ADDITIVE
PROTECH PRIME	MIRATEC TOP	WATER REMOVER	ANTI COROSSION RADIATOR ADDITIVE	ANTIWEAR HYDRAULIC ADDITIVE
PROTECH EXPERT	MIRATEC PLUS	CETANE BOOSTER	RADIATOR CLEANER	HEAVY DUTY ENGINE TREATMENT
PROLUBE GOLD II	MIRATEC RIDING MOTOR 4T	OCTANE BOOSTER		ENGINE FLUSH
		DPF CLEANER		POLISH & WAX

## HISTORY

1994	The company is founded.
1996	The company opens a Korean branch of 'Lubrizol'.
1997	The company is the first to sell automobile additives at 'E-mart'.
1998	The company is introduced by Korean domestic newspapers.
1999	The company starts 'Kumho Tire' OEM product line.
2001	The company opens a Shanghai, China branch.
2002	The company is introduced by the newspapers, 'Chosun Daily' and 'Jungang Daily'. The company received the Quality Certification approved from KIST.
2004	The company starts 'Hankook Tire' OEM product line and all branches of 'Lotte Mart' and 'Homeplus'.
2005	The company opens a Japan branch and starts to export.
2008	The company starts '3M' OEM product lines and is introduced by Japan Daily Newspapers.
2009	The company starts to sell products as 'JAPEC' in Japan and also exports to China Shandong branch and Kazakhstan.
2010	The company opens an branch of China and starts to export to the Philippines.
2012	The company is invited to 'Beijing International Automotive Exhibition 2012' and 'KINTEX KOAASHOW Korea'.
2013	The company is invited to 'KINTEX KOAASHOW Korea'. The company opens a branch of Simyang.
2014	The company opens a branch of Indonesia and KOTRA Japan branch. The company is invited to 'KINTEX KOAASHOW Korea'.
2015	The company is invited to 'KINTEX KOAASHOW Korea'. The company opens a branch of Indonesia and KOTRA Japan branch.
2016	The company is invited to 'KINTEX KOAASHOW Korea'. Participated in the KINTEX Automotive Week the 22th Beijing Automobile Goods Exhibition the OLM technological support Supplied products (OEM) to Hyundai Oil Bank Approved Exporter of origin in Korea FTA
2017	Signed a distribution agreement with SK Speedmate's dealers Supplied OEM products to Hyundai Bluehands ISO 9001: 2015 Certifications obtained
2018	PROTECH Engine Coating Treatment Patent application by Korea Patent Office
2019	Certified as a company-affiliated technology institute The company is invited to 'KOAASHOW 2019 & GTT 2019' Approved Exporter of origin in Korea FTA

## CERTIFICATE

ISO 9001: 2015 certificates



Patent pending : Engine coating treatment



Quality Certification (Q mark) / Korea Testing Certification



SGS test result / cetane index upgrade



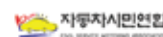
Certification of KPETRO (Korea Petroleum Quality & Distribution Authority)



Certification of KIST (Korea Institute of Science and Technology)



## PARTNERS



# ENGINE COATING TREATMENT

**PROTECH | PROTECH PRIME  
PROTECH EXPERT | PROLUBE GOLD II**



**특허청**

Application Number :  
Patent-2018-0100625

Composition for engine coating  
improved in abrasion resistance,  
heat resistance stability and  
cold resistance



Application of a brand No: 40-2011-0066929  
Q mark certificate No. : T10-2015-001



ISO 9001:2015 certificates

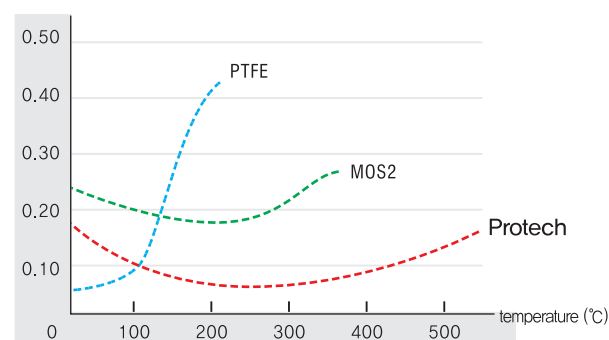
Car engine is subject to abrasion amid continuing friction and high temperature. It is important to protect car engine. The lubricant coating agents for car engine are special additives designed to form a strong coating film in the interior of the engine to prevent friction and eventually to protect the engine. In addition to the protective role, the products are effective in reducing noise, improving fuel economy and extending engine oil life. Dealim Enterprise obtained a quality accreditation mark for the first time in Korea with its engine coating agents, which are highly effective for new and used cars.

## Main benefit

- Better for extreme condition. (over-speeding, long distances)
- Noise-reducing by putting into manual transmission and differential gear box.
- Increasing hydraulic effect when put into power oil and hydraulic oil.
- Fuel saving up to 5%.
- Extend the oil changing cycle up to 20,000Km.
- Keeping the coating effect up to 30,000Km with one time put.
- More Effective when put into a new car or after boring.
- Not contain PTFE materials, No Side Effect.

## Test Results

Comparative table - coefficient of friction by temperature



## Application

Gasoline, Diesel, LPG

## User Guide

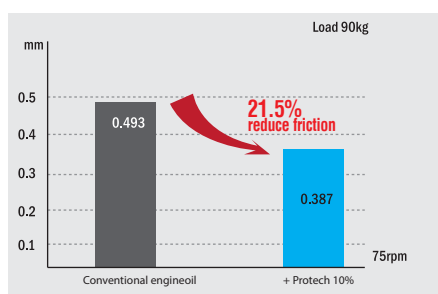
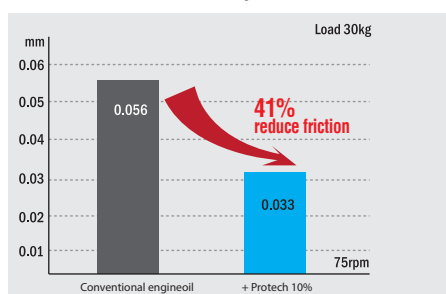
The amount of product can be equal to 8-13% of engine oil volume

100ml	motorcycle (4-wheel motorcycle)
500mL	sedan, mini-van, light-sized truck
1L	large truck, bus, heavy machinery
20L	ship

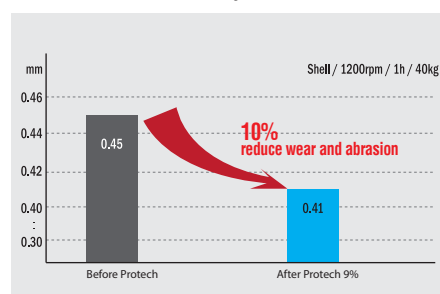
Wear after Extreme Pressure Test (TIM KEN)



## Friction test (validated by KIST)



## 4-Ball Test (validated by KTC)



# PRODUCTS

Daelim's engine-coating treatment leads to the development of the best technologies and innovative quality.

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## PROTECH

NET Contents : 100ml, 500ml, 1000ml

### Main Function

Engine protection / Extension of engine oil life  
Enhanced engine performance / Noise reduction  
Prevention of engine abrasion

### Application

Gasoline / Diesel / LPG  
100ml - 4T motorcycle  
500ml - cars  
1000ml - large truck & heavy duty



### User guide

Put one bottle of this product into the engine oil inlet.

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## PROTECH PRIME

NET Contents : 350ml

### Main Function

Oxidation prevention of engine oil / Add Organic molybdenum to enhance clean dispersion  
Noise reduction / Prevention of engine abrasion / Engine Protection

### Application

Gasoline / Diesel / LPG

### User guide

Put one bottle of this product into the engine oil inlet per 6~8L engine oil.

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## PROTECH EXPERT

NET Contents : 500ml

### Main Function

Add Organic molybdenum for excellent engine protection  
Engine Protection / Engine Treatment / engine restoration / Improvement in fuel efficiency

### Application

Gasoline / Diesel / LPG

### User guide

Put one bottle of this product into the engine oil inlet per 6~8L engine oil.

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## PROLUBE GOLD II

NET Contents : 500ml

### Main Function

Engine protection / Extension of engine oil life  
Enhanced engine performance / Noise reduction  
Prevention of engine abrasion

### Application

Gasoline / Diesel / LPG

### Remark

Exclusively for superstore chain

### User guide

Put one bottle of this product into the engine oil inlet per 6~8L engine oil.

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# 100% SYNTHETIC ENGINE OIL

MIRATEC | MIRATEC REFILL | MIRATEC PLUS



Miratec / 1L & 4L



Miratec PLUS /1L

MIRATEC RIDING MOTOR 4T / 1L



Q mark certificate No. : T3-2015-002

This functional synthetic engine oil overcomes the weakness of conventional engine oil and extends engine oil life by 20,000km~30,000km in maximum. Its engine protection stands out with high levels of additives added to premium base oil, which are highly abrasion resistant, heat-resistant and anti-oxidation. Its lubricating properties allow the engine to be functional as much as a new engine despite a long drive by reducing friction of the lubricated parts.

## Main benefit

### Stability

- High performance synthetic engine oil that exceeds existing synthetic engine oil
- Improved running stability with anti-friction agent
- Improved viscosity stability by viscosity improver

### Economics

- High fuel efficiency
- Reduction of engine soot, emissions and harmful exhaust gas
- Extend engine oil change time and improve driving performance

### Engine protection

- Add anti-wear inhibitor to reduce engine wear
- Reduced friction and wear of critical engine parts
- Maintain long engine life
- Improve engine cleanliness,
- Maintain high TBN (Alkali)
- Prevent accumulation of harmful sludge and carbon with detergent and dispersant

## SPEC & Application

### MIRATEC

SAE 0W30 API SN/ ILSAC GF-5 (Gasoline, LPG)  
SAE 10W40 API CJ-4/SL ACEA E9 (Diesel)  
SAE 5W30 API SN / CF, ACEA C2/C3/A3/B3/B4 (Gasoline&Diesel)  
SAE 5W40 API SN / CF, ACEA C2/C3/A3/B3/B4 (Gasoline&Diesel)

### MIRATEC PLUS

SAE 5W30 & SAE 5W40  
API SN / CF, ACEA C2/C3/A3/B3/B4 (Gasoline&Diesel)

MIRATEC RIDING MOTOR 4T (For Motor cycle & Motor boat)  
SAE 5W40 JASO MA2

## User Guide

1. Inject MIRATEC via engine oil filler hole or follow the instructions of manufacturer.
2. Exchange expendables by replacement cycle (10,000Km).
3. Avoid mixing with other brands.
4. Recommend using CLEANTECH Engine Flush before exchanging engine oil.

# PAO BASE SYNTHETIC ENGINE OIL

## MIRATEC TOP



MIRATEC TOP / 1L (PAO)

The Miratec top is a 100% synthetic engine oil based on PAO and is suitable for all types of vehicles that use gasoline, diesel (including RV), and LPG. It has excellent low temperature start ability, reduces initial noise and engine wear, and is excellent in cleanliness, which reduces residue formation and maintains excellent initial condition of oil for a long time. High shear stability and oxidation stability ensure excellent lubricity for long-term use, fast acceleration performance, and excellent running stability.

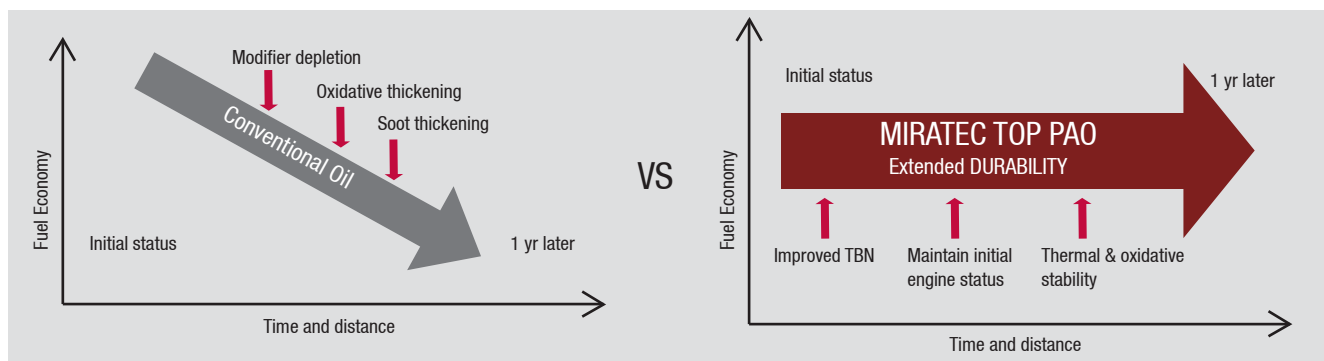
### Main benefit

1. Premium PAO-based premium base oil and additives are combined to offer excellent engine protection
2. Perfect engine performance & power
3. Reduces noise & engine abrasion
4. Long life engine oil
5. Excellent for high resistance to engine abrasion, high temperature and oxidation

### SPEC & Application

SAE 5W40, SAE 5W30  
API SN/ CF, ACEA C2/C3/A3/B3/B4  
BMW LL-04, FORD 913C, PORSCHE C30  
MB 229.51, 229.31, VW 50400, 50700  
GM DEXOS2, RENAULT RN0720

Gasoline, Diesel, LPG  
DPF, CPF  
Luxury car (BMW, BENZ, LEXUS, etc)  
DOHC, EFI, WT  
Turbocharger, Intercooler  
Sports car, Small compact car, RV/SUV



# FUEL ADDITIVE

## PROSHOT



Proshot Fuel Additive / Gasoline / Diesel 500ml

PROSHOT is an innovative fuel additive capable of thoroughly decomposing carbon, sludge and impurities in oil and cleaning vehicle fuel. It is especially effective in cleaning the injector value as it contains high-concentration dispersing agent, which is highly heat-resistant. It also prevents fuel consumption, improves engine performance and makes it possible to maintain high octane and cetane numbers.

### Main Benefits

#### Increases fuel-efficiency 5~9%

- Carbon deposit on the intake valve and injector disturbs the balanced inflow ratio of air and fuel, and finally causes incomplete combustion and excessive fumes.
- Clean fuel injectors up to 99%.
- Remove 90-99% of carbon deposit and sludge on the intake valve.
- 5% of fuel-savings and vapor corrosion inhibition.

#### Removes water in fuel tank

- PROSHOT removes water by emulsion combustion of finely dispersed water droplets in suspension.
- With PROSHOT, side effects of water such as line block, sludge, and corrosion, can be easily prevented.

#### Reduces Hazardous Fumes (19.7%)

- Vehicles with deposit-thickened injectors produce excessive by-products in exhaust fumes, such as CO and nitrogen oxides.
- PROSHOT inhibits these formations by keeping the system clean.

### User Guide

- Put one bottle of the product (500 ml) into the fuel inlet during gas pump and replace it every 5,000 km.
- Use the larger volume (1 L) for large vehicles.
- Use two bottles in a row for an old engine to boost the effectiveness of the product.

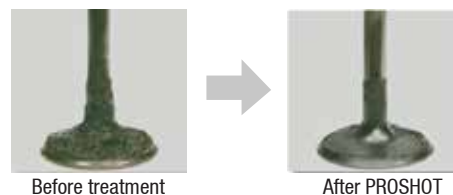
### Application

Gasoline / Diesel,

### Dosage

Passenger car, Small truck : Proshot 500ml x 1 EA per Fuel 40~80L

#### Valves Before and After PROSHOT Treatment



#### Fuel Injections Before and After PROSHOT Treatment





# FUEL ADDITIVE

## PROSHOT ADVANCE

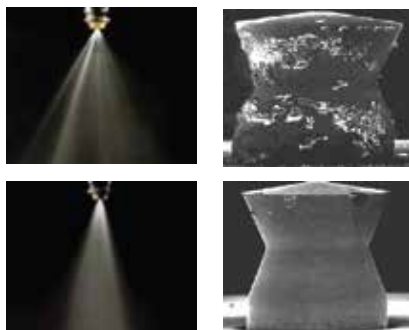


Proshot Advance Fuel Additive / Gasoline / Diesel 300ml

Proshot Advance is a product developed for vehicles that traveled over 70,000 km, which further enhances cleaning power compared to existing products. With PEA, it has twice more powerful cleaning effect for petrol and 3 times more for diesel compared to existing products. It is a functional product that cleans injector and fuel system to improve fuel efficiency and power output.

### Main Benefits for Gasoline

- Removal & prevention of sediment accumulation in fuel system of gasoline engine
- Support normal operation of exhaust systems, etc.
- Prevent corrosion of fuel system components
- Help to drain the gasoline out of the engine after moisture separation
- Regular use helps restore engine system performance  
(Recommended use every 3,000 ~ 5,000km)



Fouled Injectors Restricted Flow / New Injectors Full Flow



Dirty Combustion Chamber / Clean Combustion Chamber



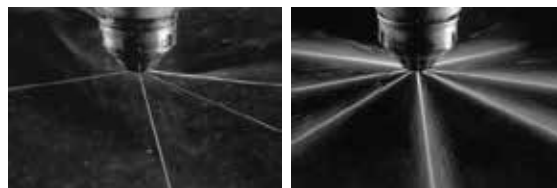
Dirty intake valve / Clean intake valve

### Main Benefits for Diesel

- Removal & prevention of sediment from fuel Injection system
- Keep the fuel system clean
- Prevent fuel pump and injector wear / Improve lubricity of fuel
- Able to silent operation and smoother start
- Increase cetane value of fuel
- Prevent output loss due to injector malfunction & improve fuel efficiency
- Recommended use every 3,000 ~ 5,000km



Dirty Injector / Clean Injector



Fouled Injectors Restricted Flow / New Injectors Full Flow

### User Guide

Put one bottle of the product (300 ml) into the fuel inlet during gas pump and replace it every 5,000 km.

# CETANE BOOSTER

## PROSHOT PLUS CETANE BOOSTER



Proshot Plus Cetane Booster / Diesel 500ml

Proshot Plus Cetane booster decomposes impurity particles in diesel fuel and induces complete combustion, making the fuel premium. It is a functional product that increases the cetane index of diesel fuel to reduce the knocking phenomenon of diesel vehicle and improves fuel efficiency.

### Main Benefits

- Cetane improvement of diesel engine:  
The average cetane index of diesel fuel in Korea is 49 ~ 52, after using this product, the cetane index increased by 8 or more.
- Improve engine power
- Injector cleaning
- Suppression of excessive emission of nitrogen oxides
- Prevent knocking

### Application

Diesel

### Dosage

Normal passenger car: Inject 1 bottle (500ml) of this product per 70L of fuel, the cetane index increased by 8  
Large diesel car : Use this product in fuel quantity basis  
The injection amount is adjusted according to the required cetane number.

### User Guide

- Put into the fuel inlet during and replace it every 5,000 km.

# OCTANE BOOSTER

## PROSHOT OCTANE BOOSTER



Proshot Octane Booster / Gasoline / 300ml x 2EA

It is a functional octane improver which improves the output and stabilizes the ride by preventing the insufficient output and knocking of the gasoline engine to help the combustion of the fuel. Domestic legal standard octane index is '91~93 for regular gasoline, 94 for high grade gasoline', and when used in a vehicle requiring high output, it maintains optimization state such as increase of output, improvement of fuel economy, improvement of quietness and reduction of vibration.

### Main Benefits

- Octane index and output improvement effect of gasoline engine
- Injecting 300ml x 1 bottle of this product:  
Fuel 30L: Increased octane index by 2.5 ~ 3  
Fuel 60L: Increased octane index by 1.5 ~ 2
- Injecting 300ml x 2 bottle of this product:  
Fuel 30L: Increased octane index by 5 ~ 6  
Fuel 60L: Increased octane index by 3 ~ 4
- Injector cleaning: Carbon and sludge removal
- Moisture Removal: Prevents rust inside the fuel system

### Application

Gasoline

### User Guide

- Put 1~2 bottles of the product into the fuel inlet during gas pump and replace it every 3,000 km.

# DPF CLEANER

## PROSHOT DPF CLEANER



Proshot DPF Cleaner / Diesel / 500ml / 1L

It is a functional product that restores the function of DPF (Diesel Particulate Filter) of diesel engine and cleans injector and EGR in engine system. This improves the performance of the DPF. When the DPF check indicator lights up or when the engine output suddenly drops due to the increase of the DPF exhaust pressure, it has a restoration function with only additive without decomposing DPF. It can be used regardless of the type of diesel engine and DPF of all kinds.

### Main Benefits

- Perfect cleaning, restoration and performance improvement of DPF
- Injector cleaning reduces exhaust SOOT
- Cleaning of EGR, Turbocharge
- Restoration function with only additive without decomposing DPF
- Engine output increase

### Application

Available on all diesel engines

### Dosage

- Purpose of DPF performance improvement  
Normal passenger car: Inject 1 bottle (500ml) of this product per 50L of fuel  
Large diesel car: Inject 1 bottle (1L) of this product per 200L of fuel
- When the DPF check indicator lights up or when the engine output suddenly drops due to the increase of the DPF exhaust pressure,  
DPF cleaning is completed when driving 100 ~ 200km after adding this product.  
Normal passenger car: Inject 2 bottle (500ml x 2) of this product per 50L of fuel  
Large diesel car: Inject 2 bottle (1L x 2) of this product per 200L of fuel

### User Guide

- Put one bottle of the product (500 ml / 1L) into the fuel inlet during gas pump and replace it every 5,000 km.

# FUEL ADDITIVE

## PROSHOT



Proshot For Heavy Duty 1L / Proshot for Ship 1L

Highly concentrated for large diesel engines, it cleans the carbon and sludge generated by incomplete combustion of the engine to keep the engine clean. It contains large amount of high-concentration dispersant with high heat stability, which improves fuel economy by exhibiting excellent performance in fuel injector valve cleaning

### Main Benefits

- Special highly concentrated additives for large diesel engines
- Induce complete combustion of the engine
- Fuel injector valve cleaning
- Improve fuel efficiency

### Application

Heavy Duty Diesel Engine, Ship

### Dosage

HEAVY DUTY	Heavy-duty diesel (Diesel fuel 200ℓ ~ 500ℓ)	Proshot for heavy duty 1ℓ x 1EA
SHIP	Marine Diesel engine (Diesel fuel 400ℓ ~ 1,000ℓ)	Proshot for shipment 1ℓ x 1EA

### User Guide

- Put into the fuel inlet and replace it regularly.

# WATER REMOVER

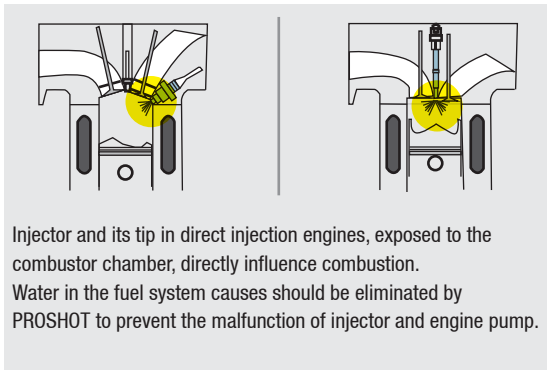
## PROSHOT



Proshot Water Remover 300ml / 1L

Moisture created in fuel can cause a variety of problems such as a sudden engine disharmony and difficulty to start. This Water remover is able to momentarily decompose moisture in fuel and prevents dysfunction of the injector and pump, making it a necessity for GDI and CRDI vehicles. It can be used to improve startability throughout the year, regardless of weather, because of its anti-rust function.

### Direct injection engine (GDI & CRDI)



### Application

Gasoline , Diesel vehicles (a necessity for GDI and CRDI vehicles)

### Dosage

Passenger car : Use one bottle (300ml ) per fuel 50L  
Heavy Duty : Use one bottle (1L) per fuel 200~300L

### User guide

- Put into the fuel inlet.
- Replace it every 3,000~5,000 km.

# ENGINE FLUSHING

## CLEANTECH



Cleantech Engine Flush 500ml / 1L

If regular oil changes have not been done on vehicles for a long time, CLEANTECH is the solution. It removes heavy build-up of sludge in a car that lacks maintenance. It cleans all internal engine parts effectively and lets the engine oil circulate freely. Your car can easily restore its lost engine power and performance.

### < Good effects of CLEANTECH >



### Application

Gasoline / Diesel / LPG

### Dosage

500ml - Gasoline, diesel, LPG vehicles  
1L - Large diesel vehicles

### User guide

- Put one bottle of this product (500 ml) into the engineoil inlet per 4~6 L of engine oil before engine oil is replaced.
- Idle operation for 10 minutes.
- Change the engine oil with new engine oil.

# ATF ADDITIVE

## PROTECH ATF



PROTECH ATF Additive 300ml

Protech ATF treatment is designed to prevent slipping, leaks and wear to provide smooth, quiet operation while conditioning seals to extend the life of the transmission.

### Main Benefits

- Instantly eliminate shudder and chatter
- Dramatically reduce friction and wear
- Increase thermal stability of ATF
- Inhibit fluid oxidation and foaming
- Improve shift quality
- Extend transmission life
- For use with ANY automatic transmission fluid.

### Application

Gasoline / Diesel / LPG

### Dosage

- Put 1 bottle (300 ml) per 5~6L of mission oil.
- Replenish 5% of the mission oil content.

### User Guide

- When changing auto mission oil, inject into the mission oil inlet.
- It is recommended to add into power steering oil.
- Replace it when chaging mission oil to enhance the performance.

# ANTI FREEZE

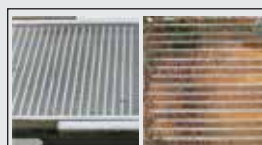
## PROTECH ANTIFREEZE ADDITIVE



PROTECH High concentrated antifreeze additive 1L / 2L

This is an innovative antifreeze additive containing organic acid anti-corrosion agent and can be used with all types of coolant. Its anti-rust function is reinforced more than 4 times, making it effective in prevent the radiator from freezing and bursting as well as rusting during winter. It protects the freezing system throughout the year, regardless of weather, and is more effective for vehicles and equipment that are used for many hours.

### < Reasons why coolant should be regular check-up >



Leakage and clogging by corrosive change of radiator and heater core induce overheating



Cooling problem and overheating by corrosion of water pump

Heat is the most important cause of engine problems. Overheating should be controlled properly to prevent engine problem and to increase the fuel efficiency and engine power.

### Application

Gasoline / Diesel / LPG

Construction, Agricultural , Marine equipment.

### Dosage

	Adding to existing antifreeze/coolant	Using alone in place of antifreeze/coolant
Passenger car	1L	2~3L
Large vehicles	2~3L	3L ~



# ANTI CORROSION RADIATOR ADDITIVE

## RADI-1



RD-1 Radiator anti corrosion additive 250ml

RD-1 Radiator rust inhibitor is a powerful rust-preventive function that is mixed with cooling water to prevent bubbles and prevent overheating of the cooling system. It is a functional product that extends the life of the radiator and raises the efficiency of the cooling system. It is easy to use on all vehicles regardless of the type of vehicle.

### Application

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Gasoline / Diesel / LPG

### Dosage

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Passenger cars, SUVs,  
1-ton trucks with cooling water capacity of less than 10 liters  
:250ml x 1 Bottle

Passenger cars, SUVs,  
1-ton trucks with cooling water capacity of less than 10 liters  
:250ml x 1 Bottle

### User Guide

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- Open the radiator cap and inject it when the engine has cooled down.  
(Or added through a cooling water auxiliary tank)
- If the inside of the radiator is corroded (rust), it is recommended to use after washing with Radiclean Radiator Cleaner

# RADIATOR CLEANER

## RADICLEAN



RADICLEAN Radiator cleaner 350ml

RADICLEAN Cleans various rusts which block the radiator in short time. It improves cooling function of radiator and prevents the trouble reasons of cooling engine like incomplete combustion, reduction of engine life, low fuel consumption, noise, water pump, etc. There is no any side effect to inner rubbers, hoses or metal parts. As a radiator cleaner, RADICLEAN disassembles and clears the polluted substances in cooling system. It also prohibits rust and corrosion and so, the cooling system's life is extended and cooling efficiency is improved effectively.

### Application

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Gasoline / Diesel / LPG

### Dosage

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Use 1 bottle (350ml) per coolant 6000ml (6L)

### User Guide

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- If the engine is cool only, you can open the exhaustion valve on the bottom of radiator to emit the existing content.
- Close the exhaustion valve, pour water over 1/2, put RADICLEAN and fill water.
- Idle the car for 15~20 minutes till the engine is up to normal temperature.
- Open the exhaust valve to emit the content.
- Pour water till clean water is out.
- Close the valve and fill the antifreeze for suitable car.

# ANTIWEAR HYDRAULIC ADDITIVE

## PROTECH H



Protech H Hydraulic oil additive 1L

It is control malfunction of hydraulic equipment by preventing and protecting. It can be mixed with hydraulic oil of all hydraulic machines and it saves time and expense due to consumption and replacement of hydraulic oil.

### Application

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- Petroleum hydraulic oil hydraulic equipment, construction hydraulic equipment, all movable and stationary hydraulic equipment mounted on vehicles, etc.
- Hydraulic fluid duty and bearing oil of rotating equipment or equipment requiring general lubrication
- After filtering hydraulic oil, it is mixed with hydraulic oil after re-use.
- In the case that you want to upgrade your hydraulic fluid

### Dosage

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- Use 500 liters of hydraulic oil mixed with 1 bottle of Protech H.
- In case of non-additive base oils, it is used in combination with Protech H 1 liter per 200 liters of non-additive base oils.

### Note when using

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- It cannot be used if the hydraulic fluid is contaminated by moisture.
- Mixing is not allowed for non-petroleum hydraulic oil (emulsion type hydraulic oil, water glycol, phosphate ester, etc.).
- The color of Protec H hydraulic fluid additive is slightly brown. When mixed, the color of hydraulic oil may change slightly, but it is not related to quality.

# HEAVY DUTY ENGINE TREATMENT

## TURBOSHOT



Turboshot oil consumption prevention 1L

It is a special engine oil additive that was born for the harsh conditions (overload, overheating, over speed) of a heavy-duty diesel engine. It keeps the viscosity of the oil even in the overheated engine. It keeps viscosity when injected into engine oil, reduces exhaust and significantly reduces oil consumption to protect engine.

### Application

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Heavy Duty Diesel Vehicle

### Dosage

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Use 1 bottle (1L) per engine oil 20L.

### User Guide

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- Before changing the engine oil, inject the Turboshot into the engine oil inlet.
- If the degree of damage of the engine is severe, it is added in an increased amount.

# POLISH & WAX

## PROTECH S-COAT



Protech S-coat

It is an all-purpose exterior polisher that cleans, polishes, and coatings the exterior of a car at once. Contains natural wax and special resin to form transparent and hard coating film to protect paint surface from dust and other pollution. Longer gloss makes car wash and maintenance easier. It also excellent for tar and scratch removal and able to use for both manual and machine operations.

### Main benefit

- Formation of hard coating with natural wax and special resin
- Protection of paint surface from dust and other pollution
- Excellent persistence of gloss and coating
- Manageability of washing and maintenance
- Able to use for both manual and machine operations

### Application

Apply to the exterior surfaces of all vehicles

### User Guide

- Clean the surface to be applied.
- Shake the product thoroughly
- Apply evenly while drawing a circle with a wax pad
- Polish with a microfiber towel when the applied wax dries
- Use regularly to maintain gloss

# ENGINE CARE SET

## GOOD MORNING ENGINE CARE SET

: Prolube Gold II Engine Coating Treatment 350ml & Proshot Fuel Additive 300ml



ISO 9001: 2015 certificates



Engine care set for Diesel



Engine care set for Gasoline

An engine care set that changes the sound of the morning start. It consists of Prolube Gold II engine coating and a set of Proshot fuel additives. It is designed to make it easy for anyone to manage the engine at once. Powerful engine protection, as well as improved fuel economy and reduced emissions.

### Main benefit

#### PROLUBE GOLD ENGINE COATING TREATMENT

This product is able to prevent abrasion of internal engine components by coating them with a strong film, optimizing engine operation and maintenance.

#### PROSHOT FUEL ADDITIVE

This is an innovative fuel additive capable of thoroughly decomposing carbon, sludge and impurities in oil and cleaning vehicle fuel. Makes it possible to maintain high octane and cetane numbers.

### Application

For Gasoline / For Diesel

### User Guide

Engine coating treatment:

Put one bottle into the engine oil inlet for passenger cars and small trucks.

Fuel Additive :

Put one bottle into the fuel inlet during gas pump and replace it every 5,000 km.

# OEM / ODM

## Proposals for strategic alliance and joint development

- OEM manufacturing services for the distributors of lubricants, chemicals, additives, automotive parts and car care products for their own private labels.
- Consignment manufacturing service for the distributors/retailers of chemical products used for vehicles, which they have produced in small quantities.
- Development and manufacture of optimized products for the companies that want to develop new car care or chemical products.
- Consulting services and support for the individuals who set up a business for chemical additives in relation to overall business potentials, product and distribution.
- Manufacture and supply of products for exporting under the brand name of clients.
- Consulting services in relation to manufacture, production and distribution.

## Portfolio



3M Korea (2008~)  
Engine coating treatment / Fuel additive



Hyundai oil bank (2016~)  
Engine Flushing



3M Korea -SK (2017~)  
Fuel additive



OLIM China (2013~)  
Synthetic engine oil / Engine coating treatment / Fuel additive



10-year Riding Clinic Center  
(2010~)  
Engine Flushing



LUBLUB (2016~)  
Engine coating treatment



CASCO Powerplus 300  
Engine coating treatment



KASS 153 (2016~)  
Engine coating treatment



JAPEC Japan (2009~)  
Engine coating treatment / Fuel additive

# ENGINE CARE SOLUTION

Engine care courses for the best performance of engine

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## Basic engine care course



Cleantech Engine Flush → Miratec 100% Synthetic Engine Oil → Protech Engine Coating Treatment → Protech Anti Freeze Additive → Radi-1 Anti Corroion Radiator Additive

## Premium engine care course



Cleantech Engine Flush → Miratec TOP 100% Synthetic Engine Oil → Protech PRIME Engine Coating Treatment → RADICLEAN radiator cleaner → Protech Anti Freeze Additive → Radi-1 Anti Corroion Radiator Additive

## Engine care courses by condition of car

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### New car

#### economy course



Goodmorning engine care set  
Prolube gold engine coating treatment + Proshot fuel additive

#### premium course



Protech engine coating treatment → Protech Anti Freeze Additive + Proshot fuel additive  
(replace it every 3,000 km)

### 3years / with under 30,000 km

#### Basic engine care course



Cleantech Engine Flush → Miratec 100% Synthetic Engine Oil → Protech Engine Coating Treatment → Protech Anti Freeze Additive → Radi-1 Anti Corroion Radiator Additive + Proshot fuel additive (replace it every 3,000 km)



# TERMS

## Viscosity

Viscosity index (VI) is an arbitrary measure for the change of viscosity with variations in temperature. The lower the VI, the greater the change of viscosity of the oil with temperature and vice versa. It is used to characterize viscosity changes with relation to temperature in lubricating oil.

### Viscosity unit

Absolute viscosity : Poise : g/cm-sec

Kinematic Viscosity : The cgs physical unit for kinematic viscosity is the stokes (St). Water at 20 °C has a kinematic viscosity of about 1 cSt. (cSt unit : mm<sup>2</sup>/sec)

### Viscosity classification by institution

SAE(Society of Automotive Engineers) :

Mobile Lubricant (Engine oil, Gear oil)

ISO(International Organization for Standardization) :

Industrial Lubricant

AGMA(American Gear Manufacture Association) :

Industrial Lubricant

### Oil Specifications

API(American Petroleum Institute )

- Gasoline Engine oil (SA, SB,...SM)
- Diesel Engine oil (CA, CB,... CJ-4)
- Gear oil (GL-1, GL-2,... GL-6)

ACEA(European Automobile Manufacturers Association )

Gasoline / Diesel	
A1/B1	Low viscosity, Low friction - Specialized in fuel efficiency
A3/B3	High performance, Extreme condition, Long life type
A4/B4	Specialized in high performance
A5/B5	Fuel efficiency, High performance, Extreme condition
Diesel (Minimize the content of SAPS )	
C1	Low viscosity, Low friction - Specialized in fuel efficienc, Low SAPS
C2	Low viscosity, Low friction - Specialized in fuel efficiency, Mid SAPS
C3	High viscosity, Specialized in high performance, Mid SAPS
C4	High viscosity, Specialized in high performance, Low SAPS
Commercial vehicle : E4, E6, E7, E9	

ILSAC (International Lubricants Standardization and Approval Committee)

- Engine oil (GF-4, GF-5)

MIL (Military Specifications )

KS (Korean Industrial Standard )

JIS (Japan Industrial Standard)

DIN(Deutsches Institute for Normung )

W: stands for winter

**5W-40**

Low temperature viscosity index :  
Related to initial engine startability  
The lower the number the thinner the oil.

High temperature viscosity index :  
Related to performance, fuel consumption  
The higher the second number, the thicker the oil.

### LOW TEMPERATURES

The first number followed by the letter W describes the viscosity of oil at low temperatures (the W stands for winter). The lower the number the thinner the oil.

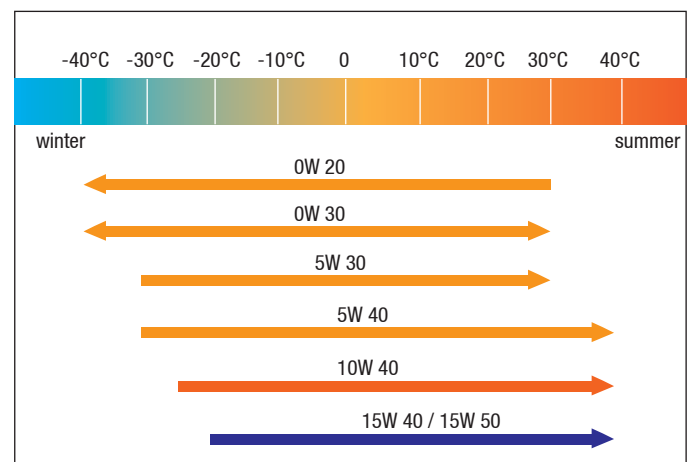
A thinner oil at low temperatures is good because it flows more easily and is therefore able to protect the engine when it is first started from cold. If oil is too thick when cold, it will not circulate freely and will reduce fuel economy.

### HIGH TEMPERATURES

The second number describes how thick the oil is at the engine's normal operating temperature.

The higher the second number, the thicker the oil. If it's too thin when hot, it may not protect effectively. If it's too thick, you lose efficiency.

SAE Viscosity Grade	Low temperature viscosity		Kinematic Viscosity (cSt) @100°C	
	Cranking (cP) max at temp °C	Pumping (cP) max with no yield stress temp °C	Min	Max
0W	6.200 at -35	60.000 at -40	3.8	-
5W	6.200 at -30	60.000 at -35	3.8	-
10W	6.200 at -25	60.000 at -30	4.1	-
15W	6.200 at -20	60.000 at -25	5.6	-
20W	6.200 at -15	60.000 at -20	5.6	-
25W	6.200 at -10	60.000 at -15	9.3	-



Engine care is essential.  
Quality control of Daelim Enterprise provides your clean engine

## DAELIM ENTERPRISE - SINCE 1994

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KS Q ISO 9001 conforms to quality management system standard  
and is certified by international standard certification authority (Certification No.: AK17QM2114)