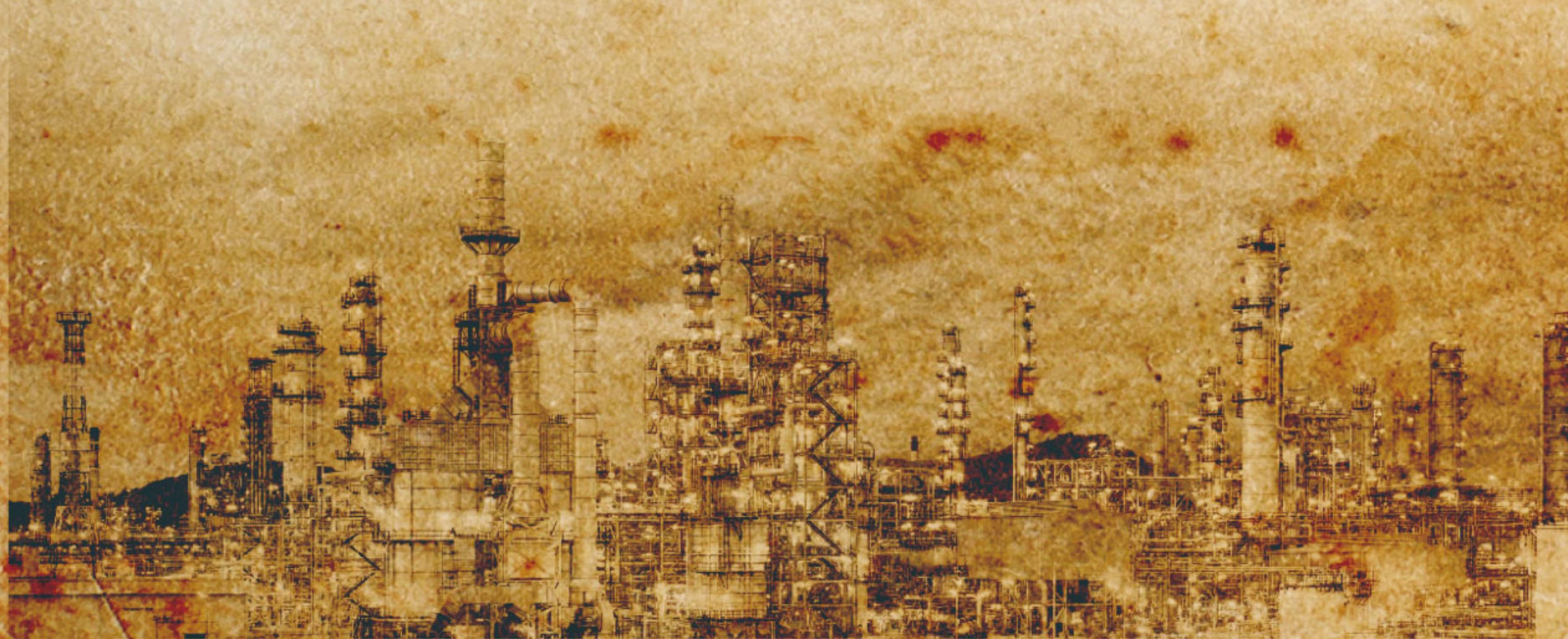


# KOREA STANDARD OIL

A BETTER TOMORROW



**KSO Co., Ltd.**

702, KDU Tower, 70, Chung Eui-ro, Songpa-gu, Seoul, Korea

Since 1995



# KSO GLOBAL NETWORK

20 countries of the world



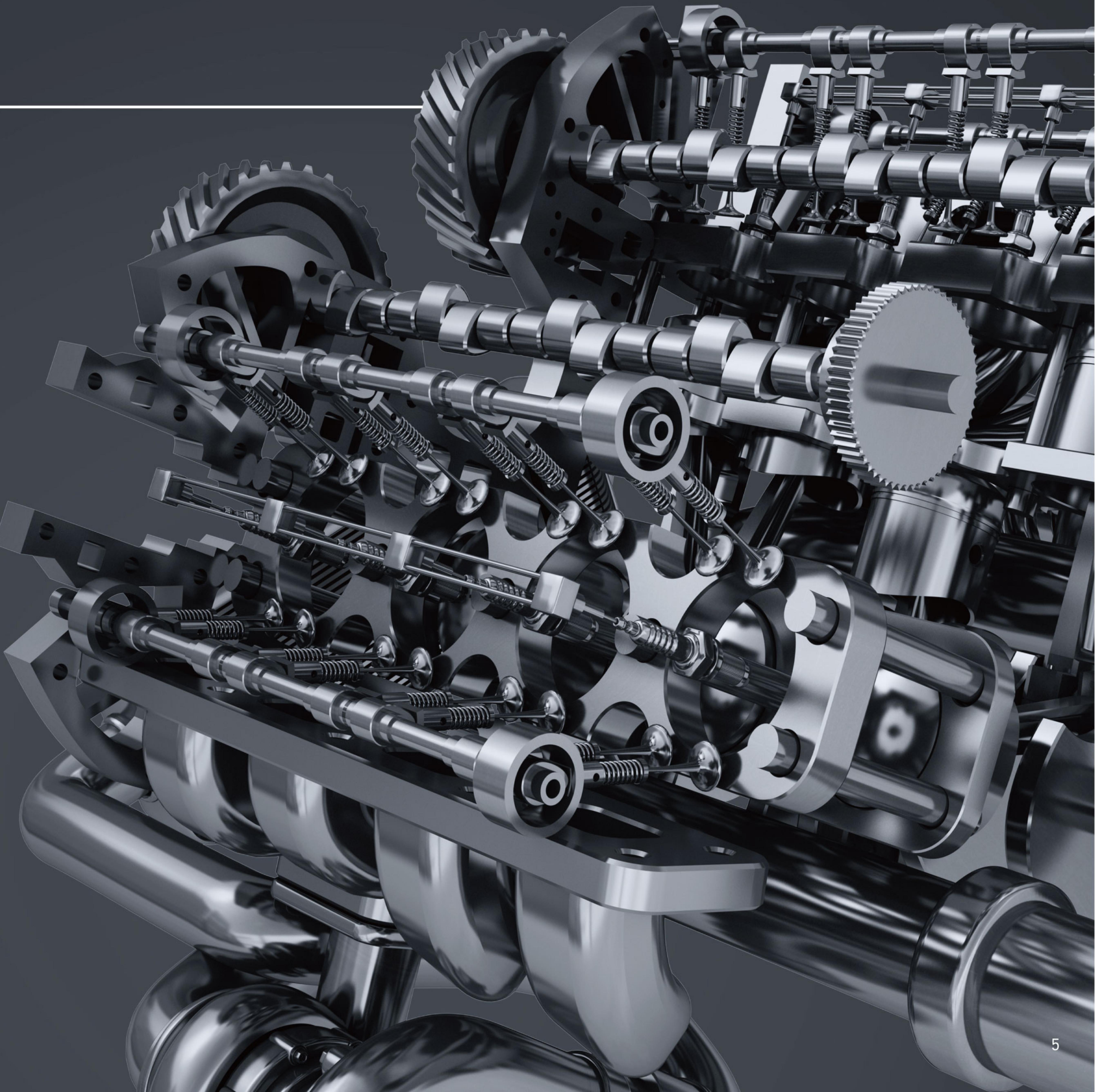
KSO Co., Ltd.

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## *LIQUID OF INNOVATION*

### Korea Standard Oil

Today, with the best of our expertise, we aim for quality and safety in engine oil.

We have a strong position in the market.

KSO offers a wide range of lubricants for passenger car, commercial vehicle and industrial applications.

KSO premium quality lubricants meet stringent oil specifications and standards.

## *ABOUT KSO*

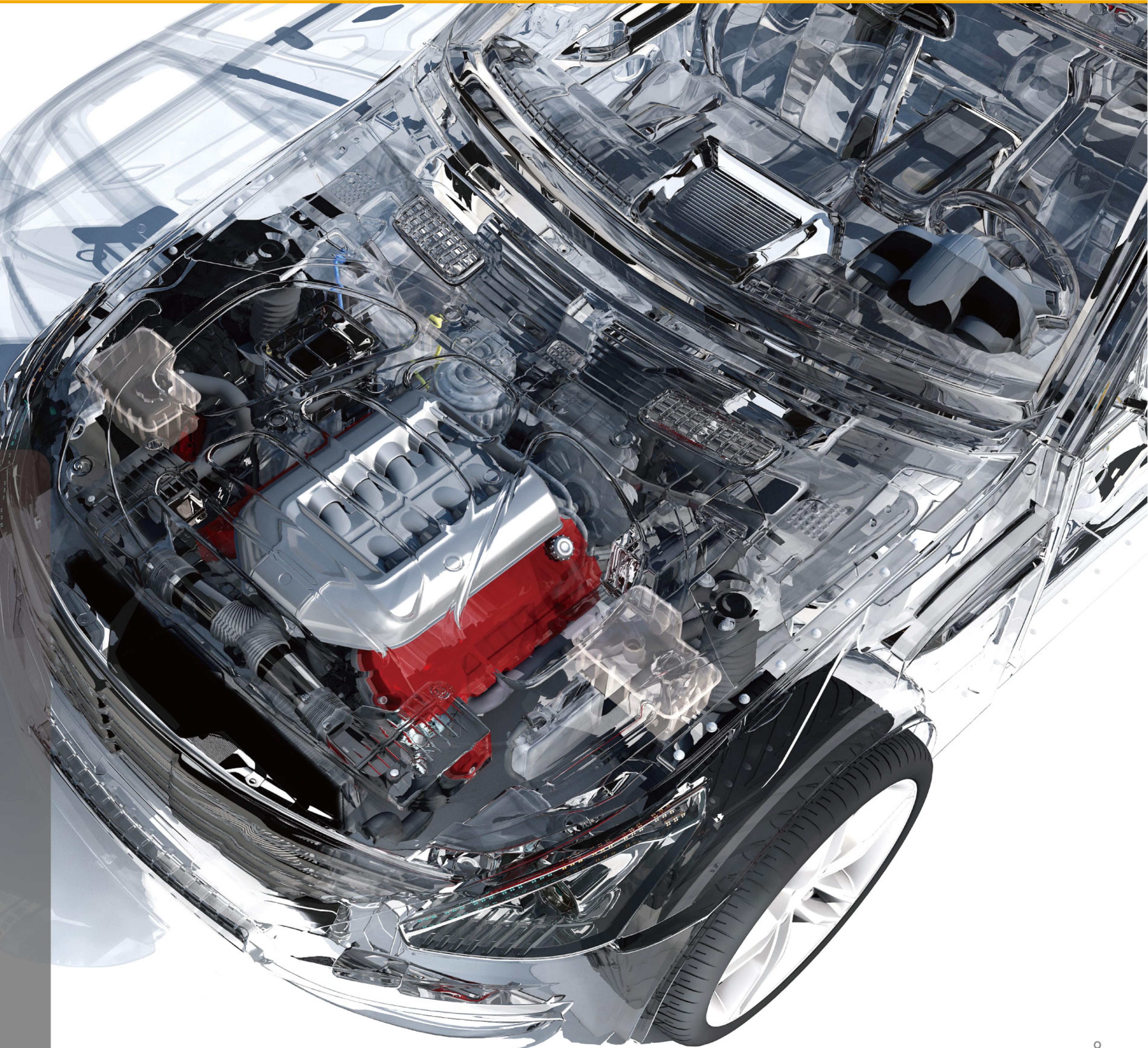
KOREA STANDARD OIL is growing into a trusted company through competitiveness based on extensive know-how and focusing on increasing the value of products with the most advanced technology.

Our technological prowess is being recognized not only in Korea but also in the global lubricant market by developing products with quality and price competitiveness while fully satisfying consumer needs and receiving various quality system certifications in each country.

Based on continuous management innovation, accumulated experience, and excellent technology, we will conduct management that looks into the distant future with customers.

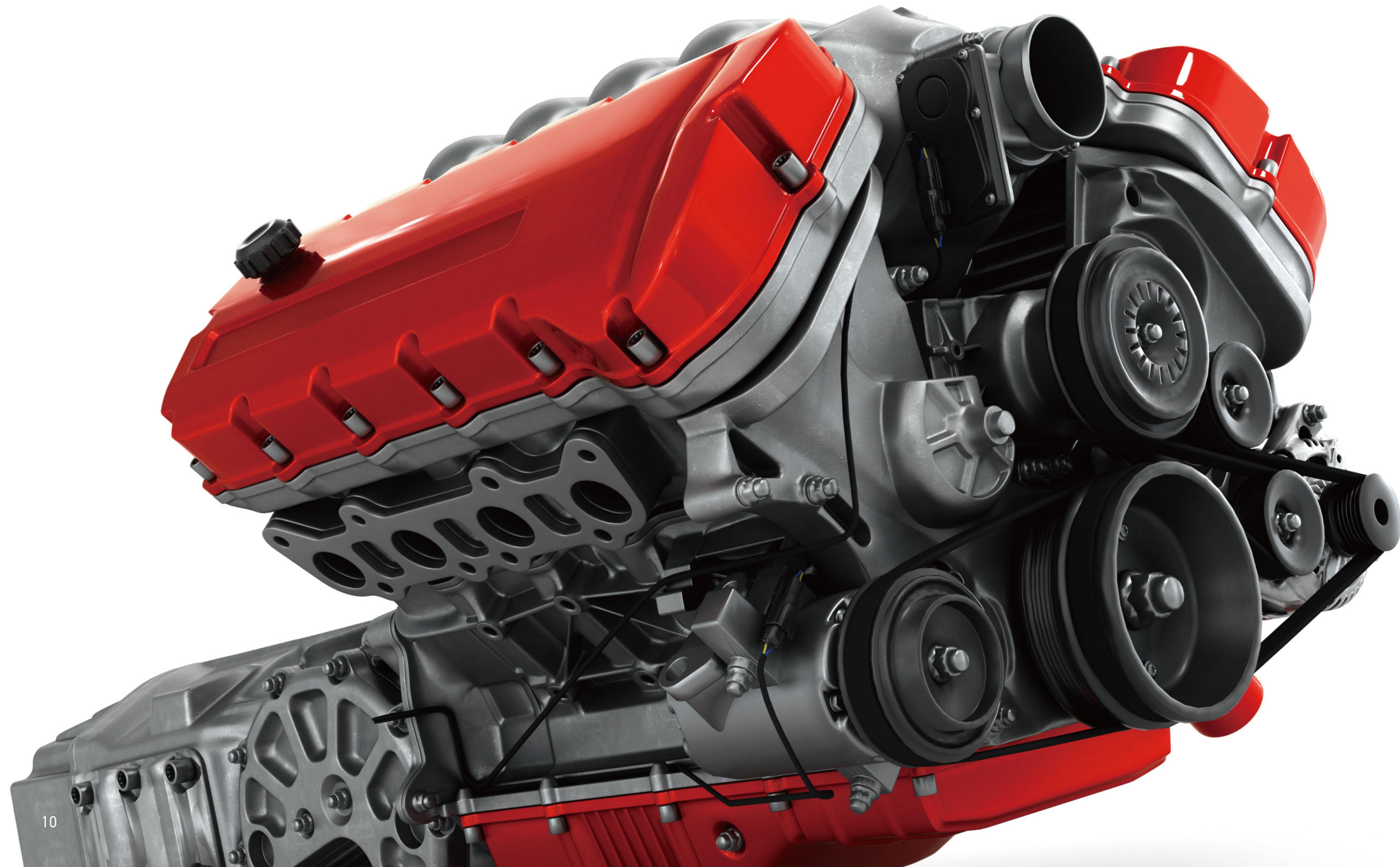
## PASSENGER VEHICLES

LEMANS F1 PAO  
LEMANS GT ULTRA  
LEMANS GRAND TOURING  
LEMANS LAND SPEED  
LEMANS LAND SPEED PLUS  
LEMANS X-DURANCE  
LEMANS DURANCE



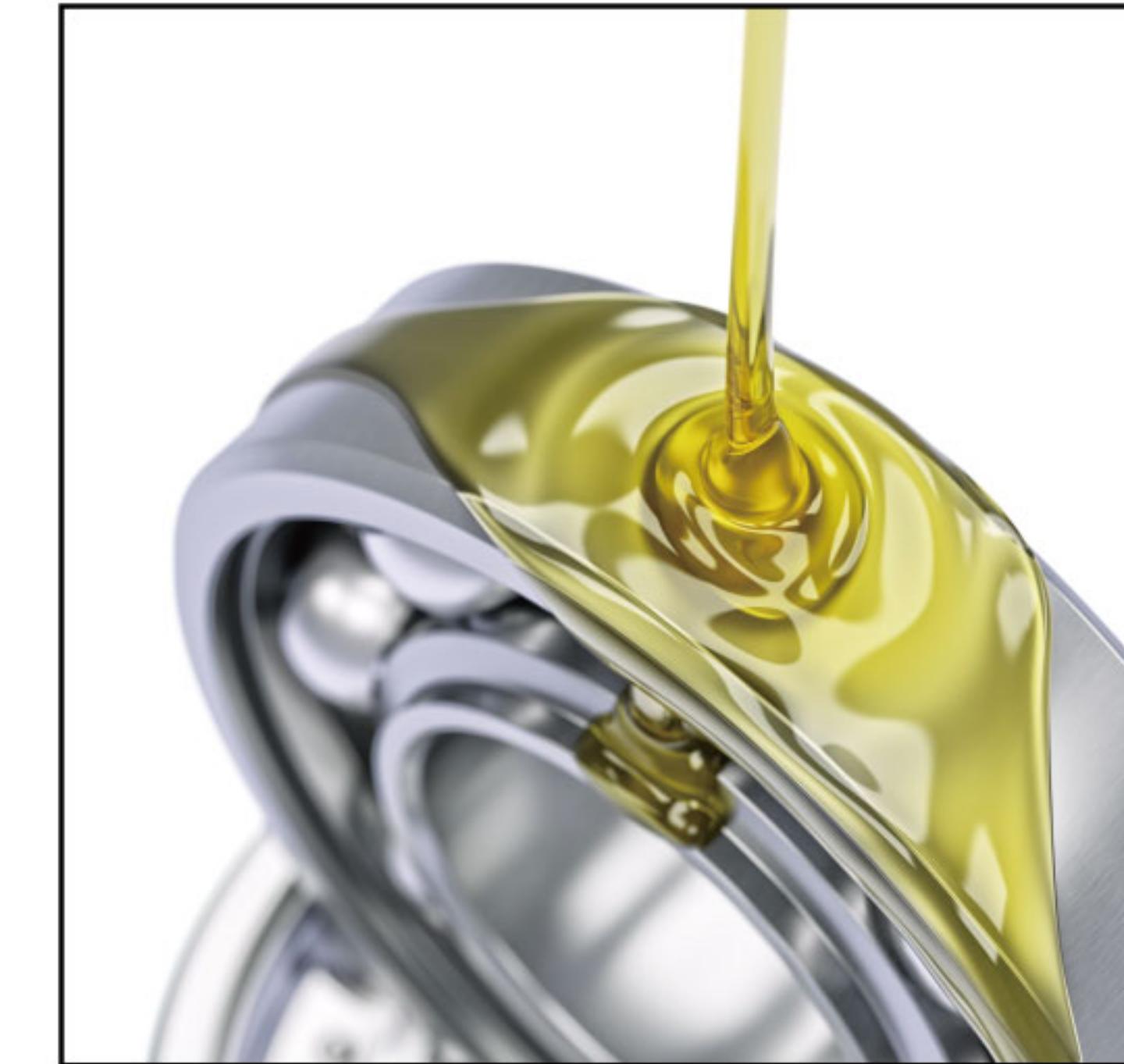
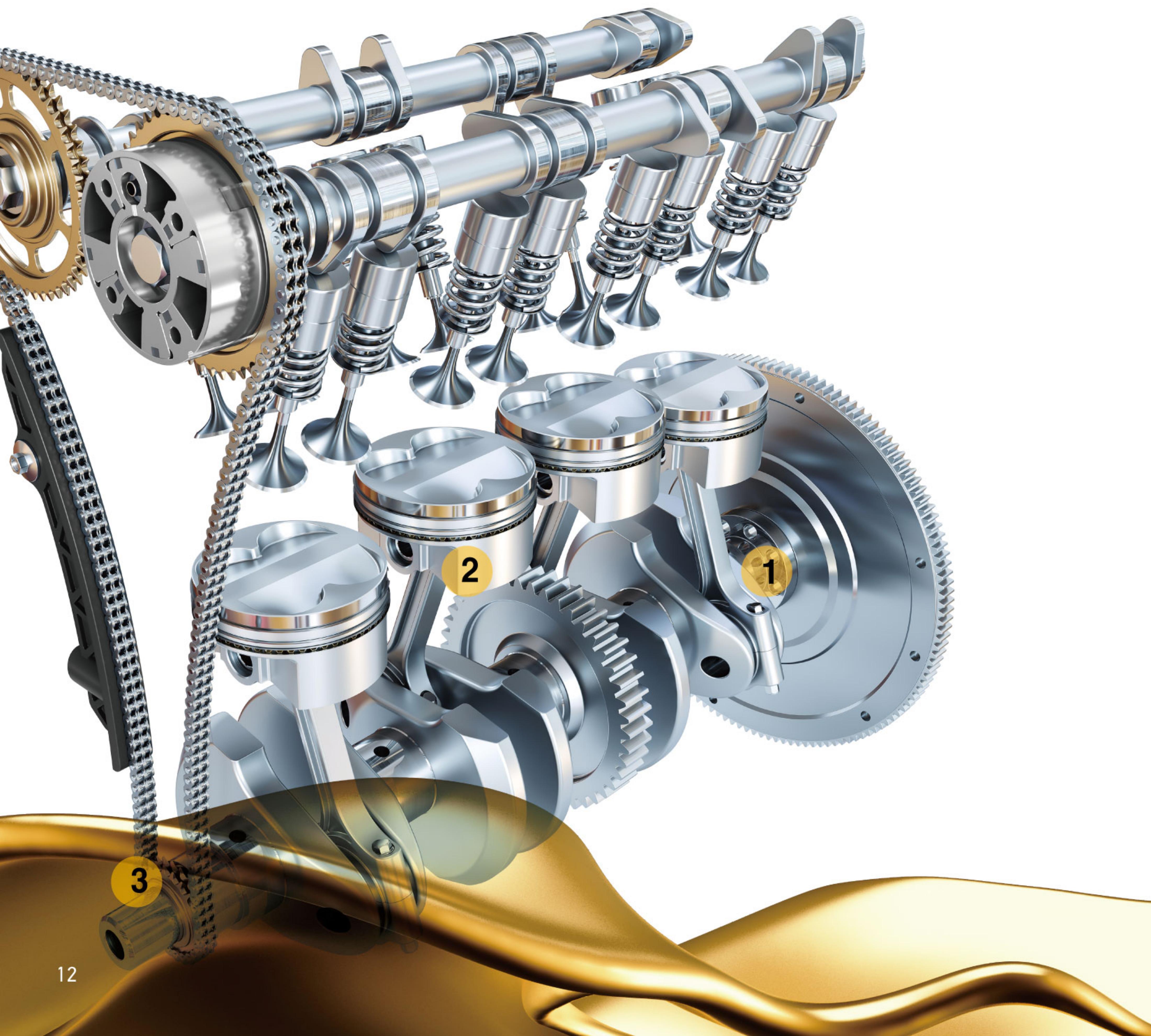
## ENGINE OILS FOR PASSENGER VEHICLES

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# ENGINE OILS FOR PASSENGER VEHICLES

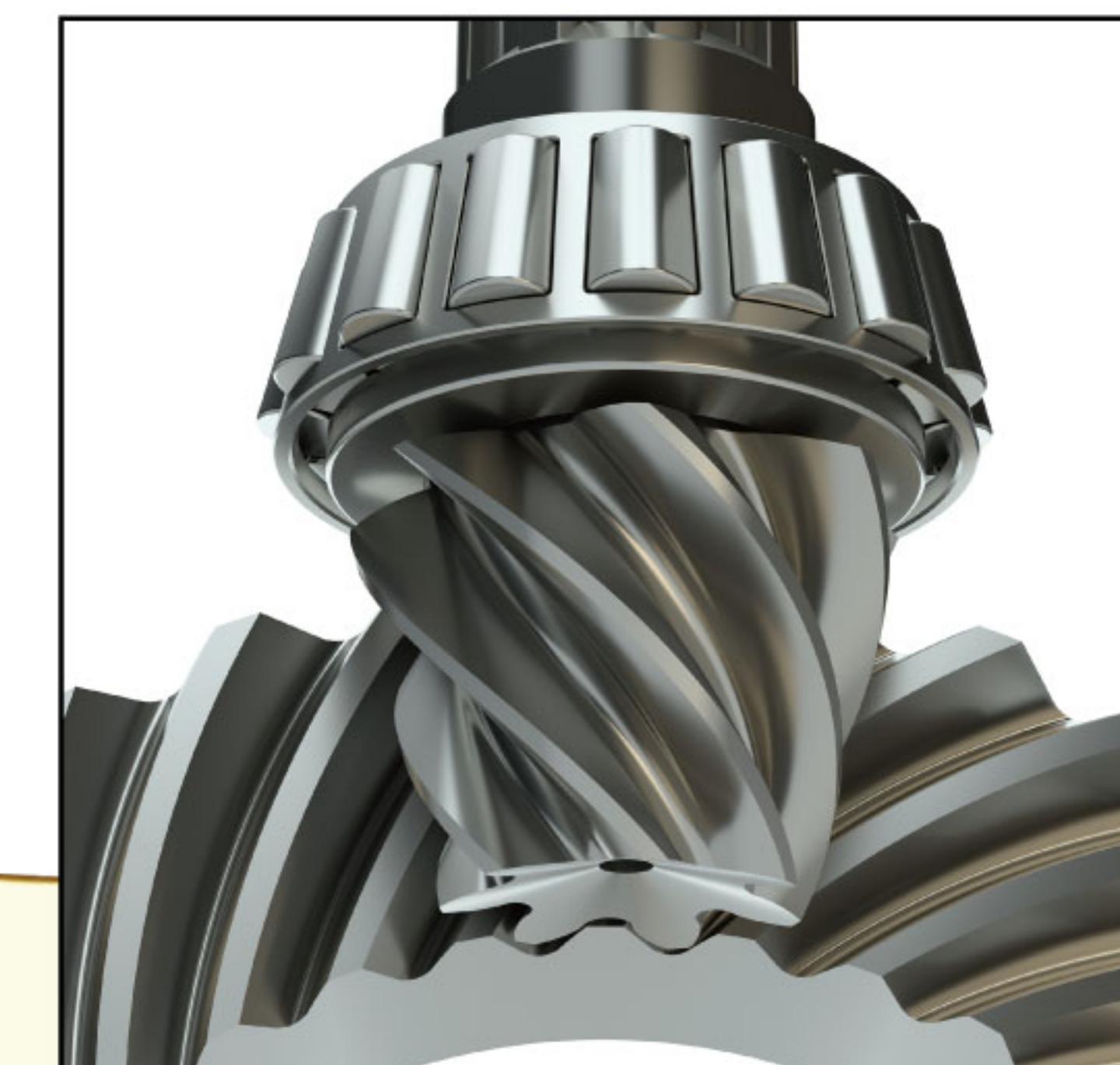
BENEFICIENT PAO FULLY SYNTHETIC MOTOR OIL



1.  
The reciprocating motion of the piston is converted into rotational motion.  
Converting the crankshaft's inertia force Lubrication function to enlarge.



2.  
Piston and internal parts, thin around the cylinder wall Maximizes lubrication by forming a film.



3.  
Assisting in operation of camshafts, valves and spring valves lubricating.

# ENGINE OILS FOR PASSENGER VEHICLES

Premium top quality engine oil made of PAO(Poly Alpha Olefin) and fully synthetic base oils, together with high-tech additives for optimized performance as well as engine protection.



# LEMANS F1 PAO

PAO (Poly Alpha Olefin) base oil.

Synthetic base oil, PAO, is used, and the highest quality additives that satisfy the highest API performance grade and European standards are used.

This is a high-end product that can be applied to vehicles that use gasoline or LPG as fuel. It reduces initial noise and engine wear with excellent low-temperature starting properties, and excellent cleanliness ensures that the sludge in the cylinder is By reducing production, it maintains the initial state of the oil for a long time. It also has high shear stability and oxidation stability. It guarantees excellent lubricity even after long-term use, and improves the engine's fast acceleration performance and smooth driving stability.

This is the highest quality PAO synthetic engine oil provided.

## APPLICATIONS

- Gasoline engine for passenger cars, light trucks and LPG engines
- High torque cars equipped with DOHC, EFI, VVT
- Engine with turbo charger and inter-cooler

## MEETS OR EXCEEDS REQUIREMENTS

- |                            |                     |                     |
|----------------------------|---------------------|---------------------|
| • ACEA A3 B4               | • VW 502.00, 505.00 | • API SN            |
| • Renault RN0700,0710      | • BMW Longlife-01   | • Ford WSS-M2C937-A |
| • MB-Approval 229.3, 229.5 | • Volvo VCC95200356 | • Porsche A40       |



# LEMANS GT ULTRA / LEMANS GRAND TOURING

LEMANS GT ULTRA 0W30 is an engine oil manufactured with 100% synthetic oil and has the highest API grade and ACEA C2 C3. It is the highest quality engine oil that meets the specifications. For all vehicles equipped with gasoline, diesel and LPG engines and imported vehicles. It can be used, reducing exhaust gas emission and noise, excellent oxidation stability and perfect engine protection performance, etc. This is the best engine oil.

## APPLICATIONS

- Gasoline, diesel and LPG engines for all models
- Light passenger car, RV, SUV, high horsepower vehicle
- Luxury vehicles such as BMW and Benz
- Vehicles that want to extend the lubricating oil change interval

## MEETS OR EXCEEDS REQUIREMENTS

- API SN • ACEA C2

LEMANS 5W30 is an API formulated with 100% synthetic oil and state-of-the-art additives. It is the highest grade gasoline engine oil that satisfies the highest grade SN and ILSAC GF-5. high-pressure direct injection. This oil is suitable for gasoline engine protection.

## APPLICATIONS

- All gasoline and LPG models
- All vehicles using high-pressure direct injection gasoline engines
- Prevention Low Speed Pre-Ignition • Timing chain wear protection
- High-power gasoline vehicle equipped with DOHC, turbocharger, etc.

## MEETS OR EXCEEDS REQUIREMENTS

- API SN • ILSAC GF-5



## LEMANS LAND SPEED PLUS

LEMANS LAND SPEED PLUS 5W30 is an engine oil manufactured with high-performance 100% synthetic oil. It is a high-quality engine oil that meets ACEA C3 standards.

Oil hardening due to oxidation and The allowable operating range has been expanded without oil corrosion, and it provides excellent fluidity at low temperatures, making it easy to use even in winter.

Starts the engine and induces oil circulation in the engine to speed up.

Reduce friction by adding new material graphene

The internal life extension and lubrication function have been strengthened, and it can be applied to all domestic and foreign models.

### APPLICATIONS

- All gasoline and LPG models
- All vehicles using high-pressure direct injection gasoline engines
- Prevention Low Speed Pre-Ignition • Timing chain wear protection
- High-power gasoline vehicle equipped with DOHC, turbocharger, etc.

### MEETS OR EXCEEDS REQUIREMENTS

- API SN Plus • ACEA C2, C3



# LEMANS X-DURANCE

## CHARACTERISTICS

- Protects against LSPI
- Provide better engine durability
- Optimized engine cleanliness and deposit control
- Enhanced fuel economy

## APPLICATIONS

- All gasoline and LPG models
- Specially recommended for GDI/ T-GDI engines
- LPG vehicles

## MEETS OR EXCEEDS REQUIREMENTS

- API SP • ILSAC GF-6A



## COMMERCIAL VEHICLES

**SAHALA GRAND PRIX CK4(LONG LIFE)**

**SAHALA GRAND PRIX CK4**

**SAHALA PT41 CJ4**

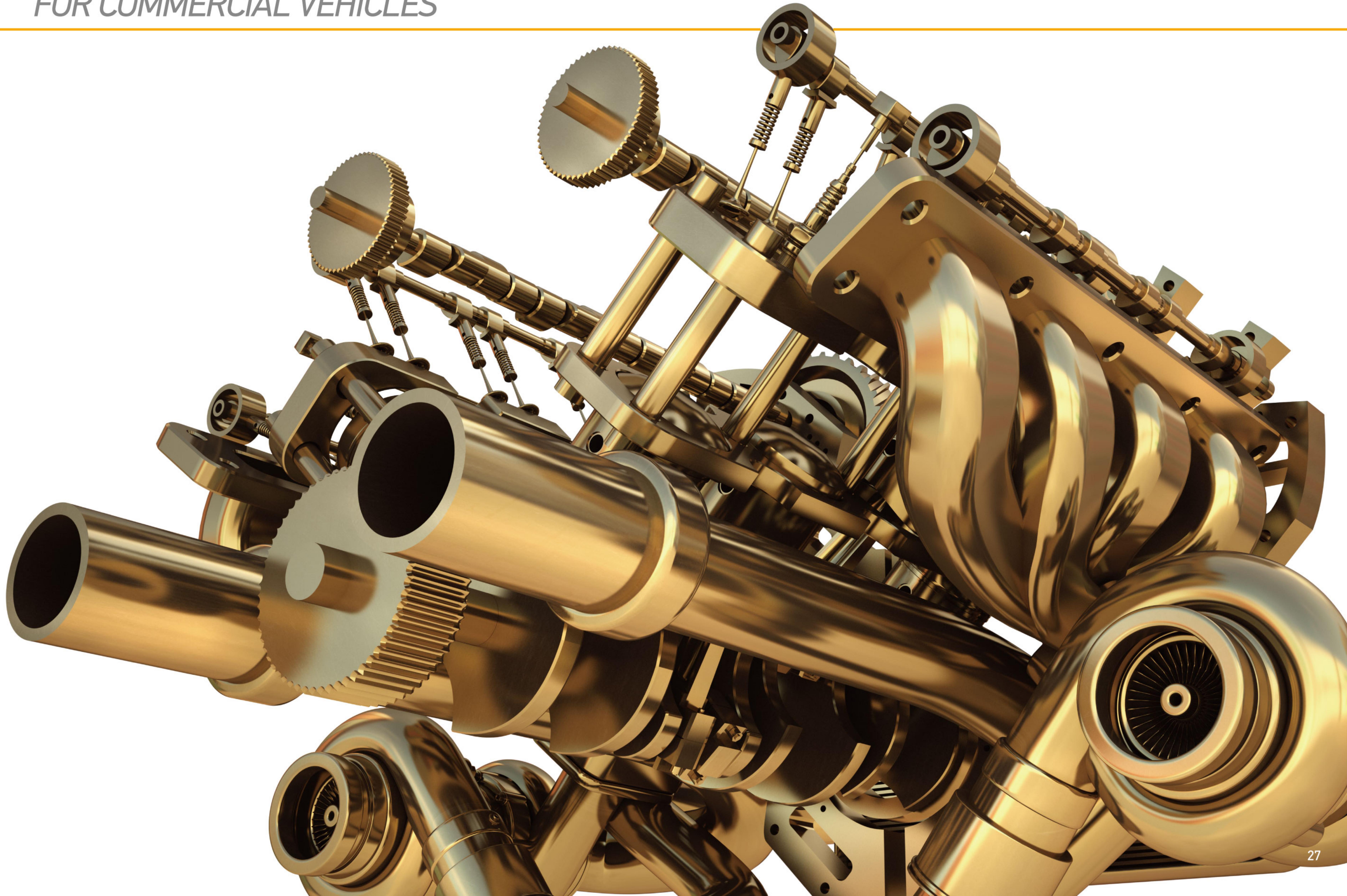
**SAHALA Rally CI4**

**SAHALA Rally Cross CF4**



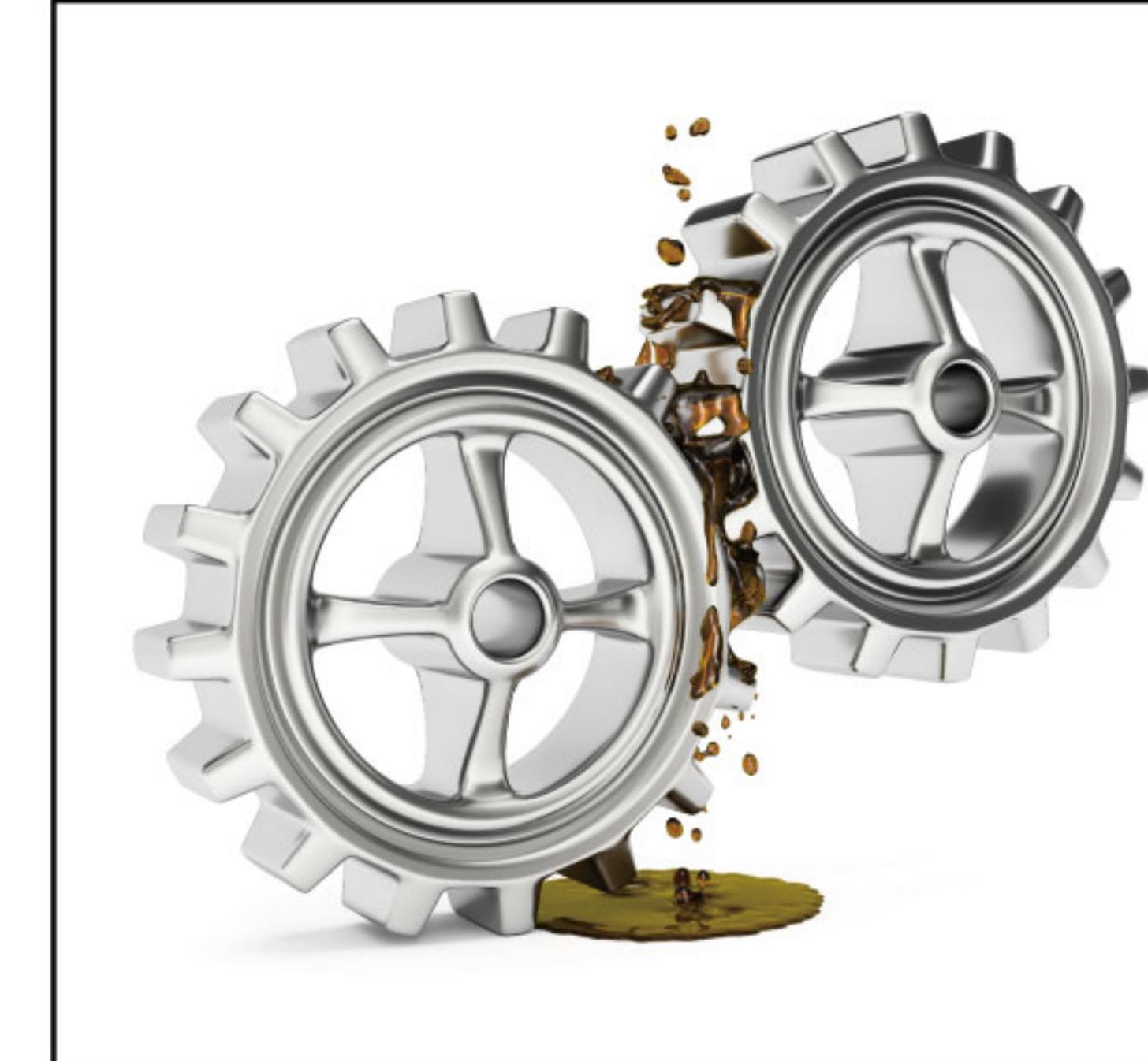
*ENGINE OILS  
FOR COMMERCIAL VEHICLES*

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# ENGINE OILS FOR COMMERCIAL VEHICLES

Heavy duty diesel engine oil for longer engine service life.



1.  
The reciprocating motion of the piston is converted into rotational motion. Converting the crankshaft's inertia force Lubrication function to enlarge.



2.  
Piston and internal parts, thin around the cylinder wall Maximizes lubrication by forming a film.



3.  
Assisting in operation of camshafts, valves and spring valves lubricating.

# SAHALA GRAND PRIX CK4 10W40

## SAHALA GRAND PRIX CK4 10W40

This is the highest grade diesel engine oil manufactured with Tri-Synthetic as the main axis, including PAO, the highest grade synthetic base oil.

It not only exceeds API grade CK-4 grade, but also meets European automotive standards and other diesel vehicle standards.

By using excellent synthetic base oil and the finest additives, it minimizes the formation of deposits and the accumulation of carbonized substances inside the engine.

It minimizes oil consumption by maintaining good engine condition, and protects the engine by maximizing the effect of preventing wear. It is the best diesel engine oil that extends engine life and improves output by reducing noise.

## APPLICATIONS

- Prevents engine damage with smooth start even at low temperatures and maintains high engine output by maintaining viscosity at high temperatures
- It prolongs engine life and reduces noise by preventing wear, damage and corrosion inside the engine under high power.
- Maintains high output by minimizing carbonized substances to keep the engine clean.
- Using the highest quality synthetic oil, it has excellent thermal and oxidation stability, extending the oil change cycle as much as possible..
- API CK-4, FA-4, API CK-4/ SN API CJ-4 CI-4 PLUS, CUMMINS CES 20086, Detroit Diesel DFS93K222, Mack EO-S-4.5, Volvo VDS-4.5, CAT ECF-3, FORD WSS-M2C171-F1, ACEA E9-16(2016), MB-Approval 228.31, Renault Truck RLD-4, MTU Type2.1, Deutz DQC III-10 LA



## MEETS OR EXCEEDS REQUIREMENTS

- High-power heavy-duty trucks and high-performance medium and small trucks
- Express buses, city buses, and medium and small buses
- construction heavy equipment • Jeep, van, RV vehicle • All other vehicles using diesel



## SAHALA PT41 CJ4 / SAHALA Rally CI4

Heavy duty diesel engine oil for longer engine service life.



KSO commercial engine oil contains graphene to induce engine cooling and reduce friction. The output and fuel efficiency are increased, and the effect of reducing noise and wear is maximized. This requires long-term engine maintenance. Excellent for reducing the total cost of ownership (TCO) for drivers by reducing costs Product.



# MOTORCYCLE OIL

2T / 4T

## KSO MOTORCYCLE OIL 2T

2T oil is the highest-quality two-stroke engine oil that can be used in air-cooled two-stroke engines by mixing it with gasoline.

Manufactured with a low-ash additive to refined base oil, it significantly reduces fumes, prevents engine wear and provides excellent rust prevention. provide performance

- Maintaining a clean engine by preventing engine wear and attachment by using special additives
- Easy to mix with gasoline
- Extends engine life by suppressing smoke generation

## KSO MOTORCYCLE OIL 4T

4T Oil is an engine oil exclusively for 4-stroke motorcycles, and it uses the highest grade additives in highly refined base oil for harsh driving.

Maintains excellent performance under conditions

- Use of the finest additives and base oil
- Minimize engine wear
- Extend engine life

# TRANSMISSION OIL

ATF3

ATF SP-4 FOR 6-8 SPEED

ATF P8

ATF ZF FORMULA 6/8/9

DSG

DCT

CVT

## ATF ZF FORMULA 6/8/9

This is a premium grade automatic transmission oil made with all synthetic oil.

Now products are sold in European, American and Asian countries.

It is manufactured to satisfy a wide range of specifications required by automobile manufacturers. By using the highest grade additives, it has better deterioration and oxidation stability and extends the life of the oil.

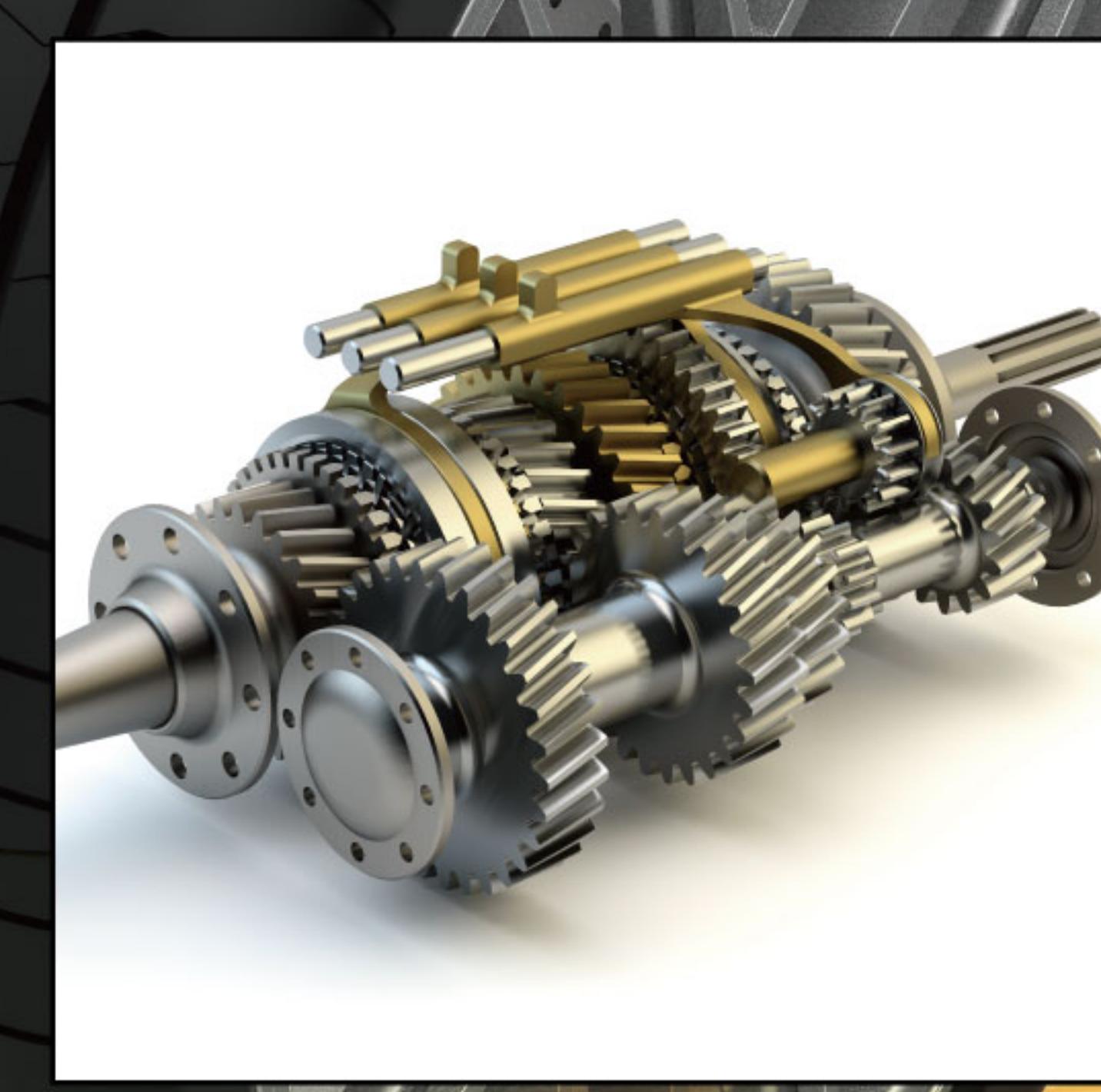
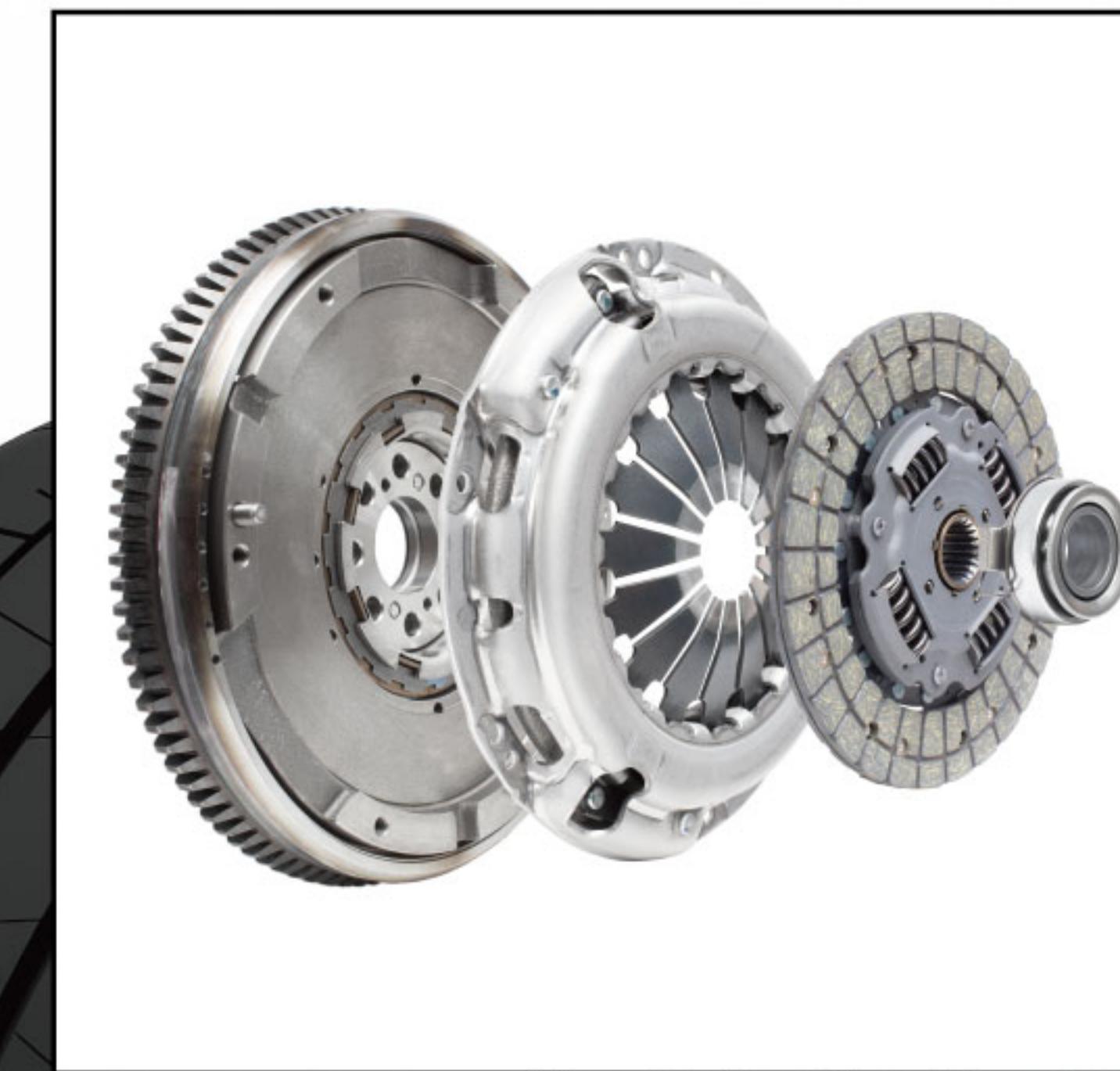
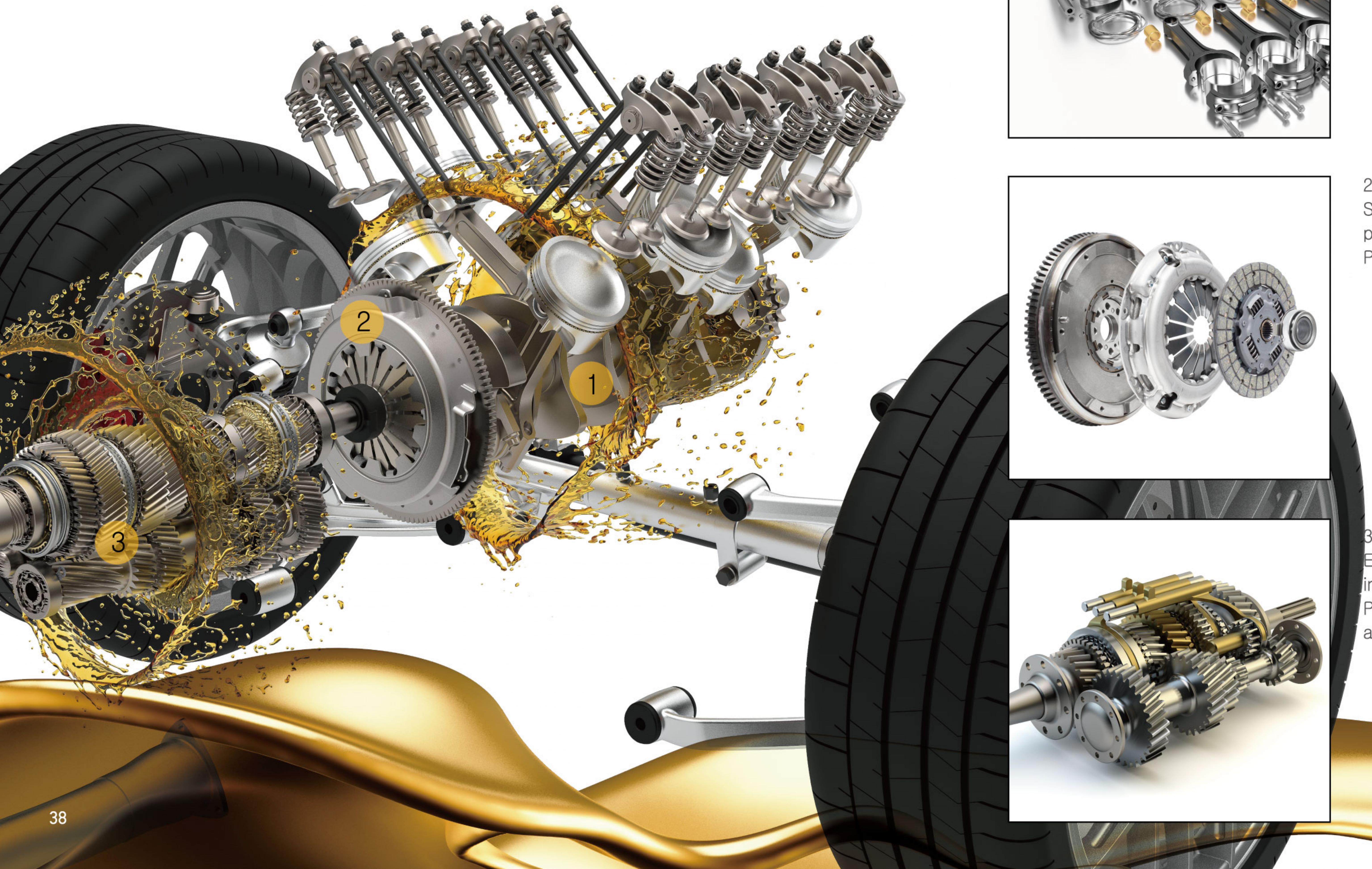
It was developed for comfortable driving by improving fluidity and preventing vibration.

## MEETS OR EXCEEDS REQUIREMENTS

- ZF TE-ML 11
- ZF LifeguardFluid 6 (ZF No. S671 090 255)
- Audi / VW Oil No. G 055005 A1 / A2 / A6
- Bentley Oil No. PY112995PA
- BMW Oil No. 8322 0142516
- Hyundai Oil No. 040000C90SG
- Jaguar Oil No. Jagual Fluid 8432
- Land Rover Oil No. TYK500050
- Maserati Oil No. 231603
- ZF LifeguardFluid 9 (ZF No. AA01.500:001)
- BMW ATF 3+, Oil No. 83 22 2 289 720
- Honda ATF-Type 3.1.: 08263-999-01HE (EU), 08200-9017(USA)
- Jaguar Oil No. 02JDE 26444
- Land Rover Oil No. LR023288
- MB 236.17

# TRANSMISSION OIL

High Performance Oil for Passenger Car ZF Automatic Transmissions



1.  
Excellent lubrication and anti-wear properties reduce wear and tear. Maintaining and extending the life of semi-automatic transmission.

2.  
Smooth and continuous all-weather shifting performance and transmission. Provides constant lubrication protection of parts.

3.  
Excellent low temperature characteristics result in easier start-up and lower ambient. Provides continuous lubrication performance even at temperature.

# MANUAL TRANSMISSION & AXLE

Developed for differential gear of big trucks and heavy duty equipment transmission without synchronizer.

GEAR OIL GL-4 / GL-5 75W85

GEAR OIL GL-5 75W90

GEAR OIL GL-4 / GL-5 80W90

GEAR OIL LSD 80W90

GEAR OIL GL-5 85W140

GEAR OIL GL-5 140

## GEAR OIL GL-4 80W90

Differential gears and heavy-duty trucks where the engine produces high output and the reduction ratio is low, which places a heavy load on the gears.

It shows excellent performance in transmissions where no synchronizers such as heavy machinery or trucks are used.

Even at high temperatures, sludge or foreign substances are not generated and the gears are protected cleanly.

### Product Specifications

- Prolongs the lifespan of equipment by preventing wear or scratching of gears and protecting gears cleanly
- Oxidation stability is good and the viscosity of oil does not change, so it can be used for a long time.
- Prevents the corrosion of ferrous and non-ferrous metals and prevents the formation of deposits at high temperatures to reduce the speed of the manual transmission.
- Softens and prevents oil consumption due to foaming

### Product use

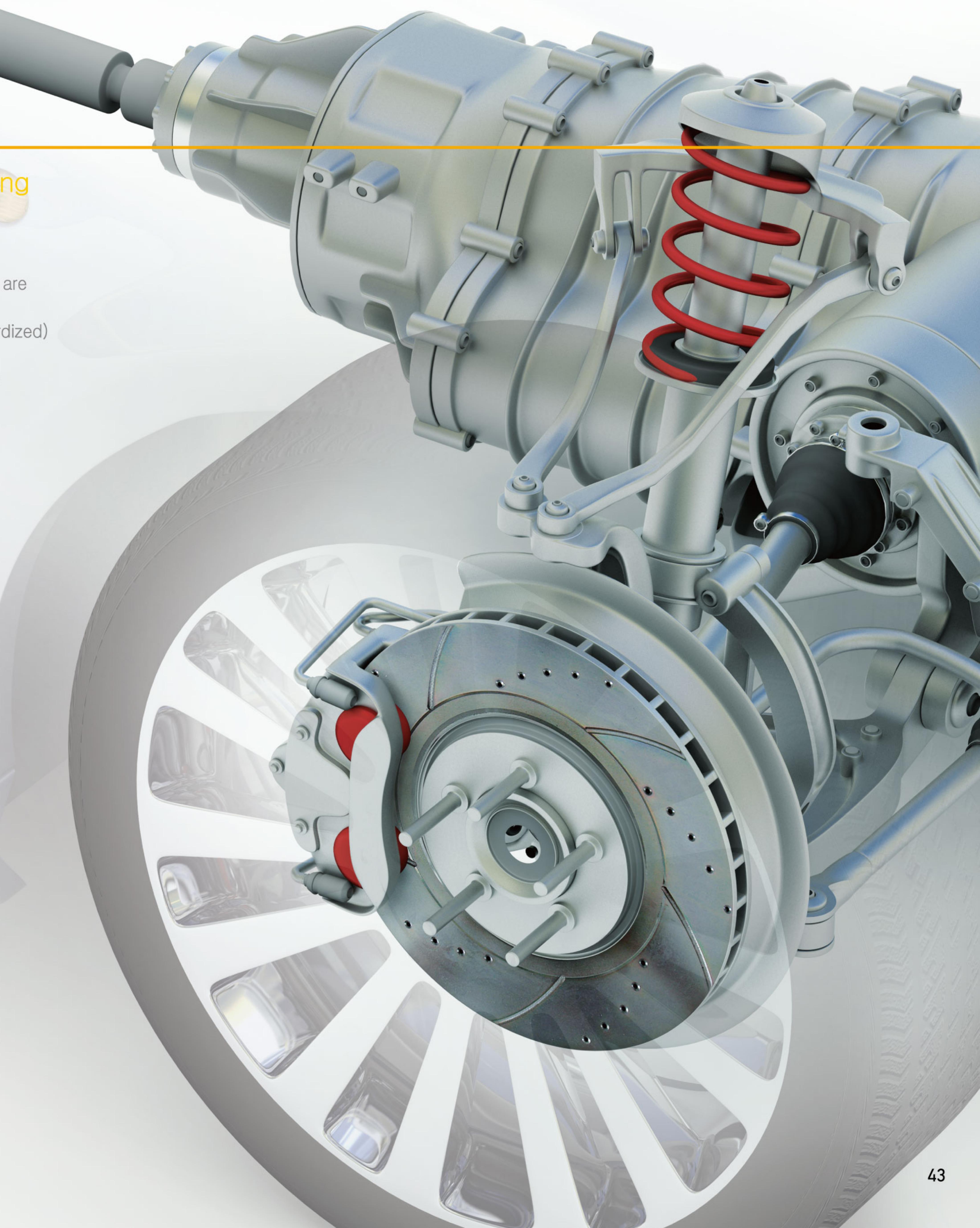
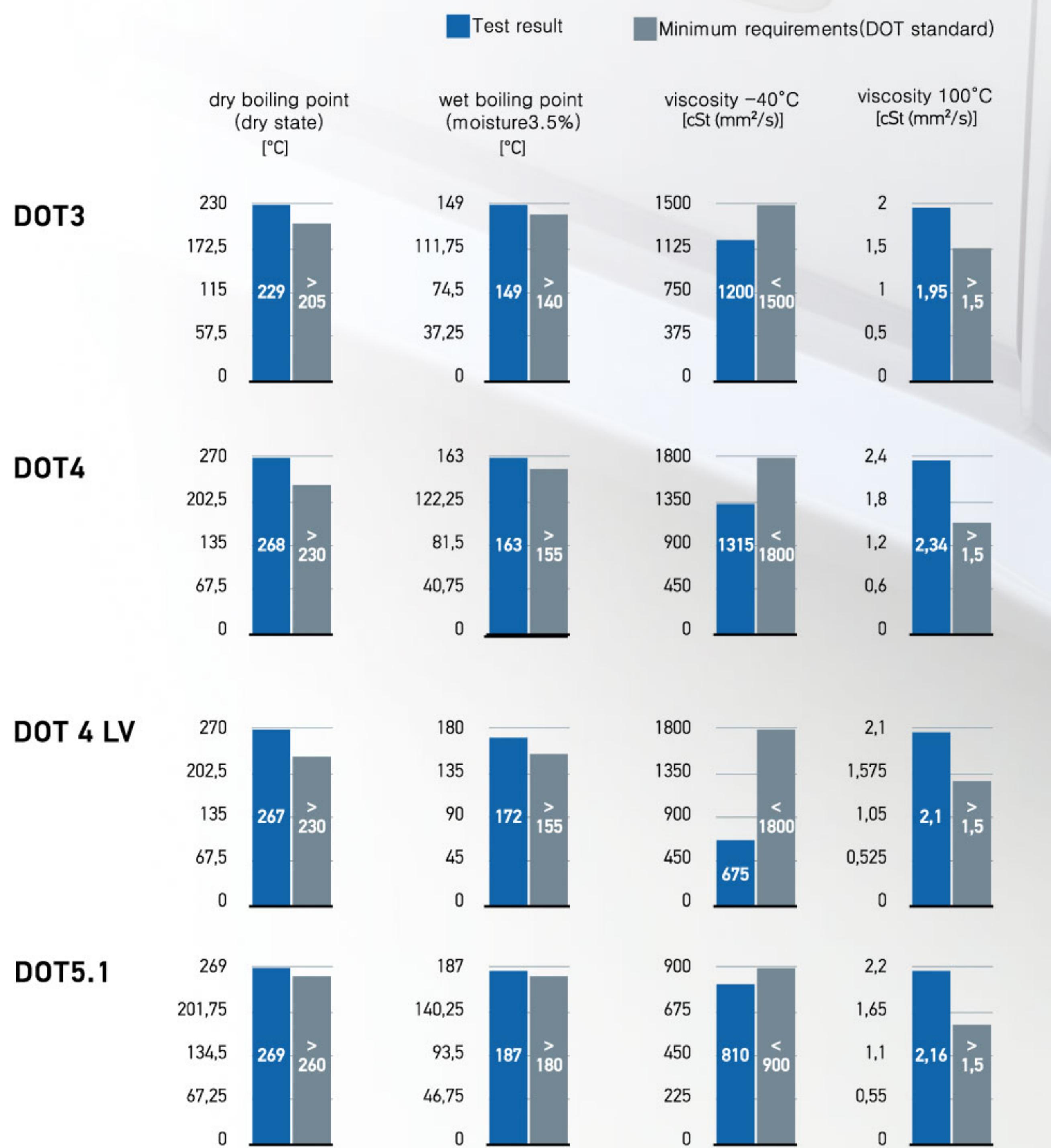
- Gear oil exclusively for rear wheels of automobiles and heavy equipment
- Manual transmissions, industrial gears and reducers that require extreme pressure



# BRAKE FLUID

KSO PAGID brake fluids are quality beyond manufacturing standards

Each brake fluid is the best brake for any type of brake system, in any situation. There must be standards for braking performance, and the relevant standards for this are dry boiling point, wet boiling point, Moisture content and viscosity. As for the standards of brake fluid, the minimum standard is DOT (the world's standardized) is a stipulated requirement according to the classification. KSO PAGID is not satisfied with just that, To ensure strong braking performance even in extreme environments, the product is tested to produce.



# COOLANT

OAT COOLANT LONG LIFE - RED

OAT COOLANT LONG LIFE - BLUE

PAT COOLANT LONG LIFE - RED

PAT COOLANT LONG LIFE - PINK

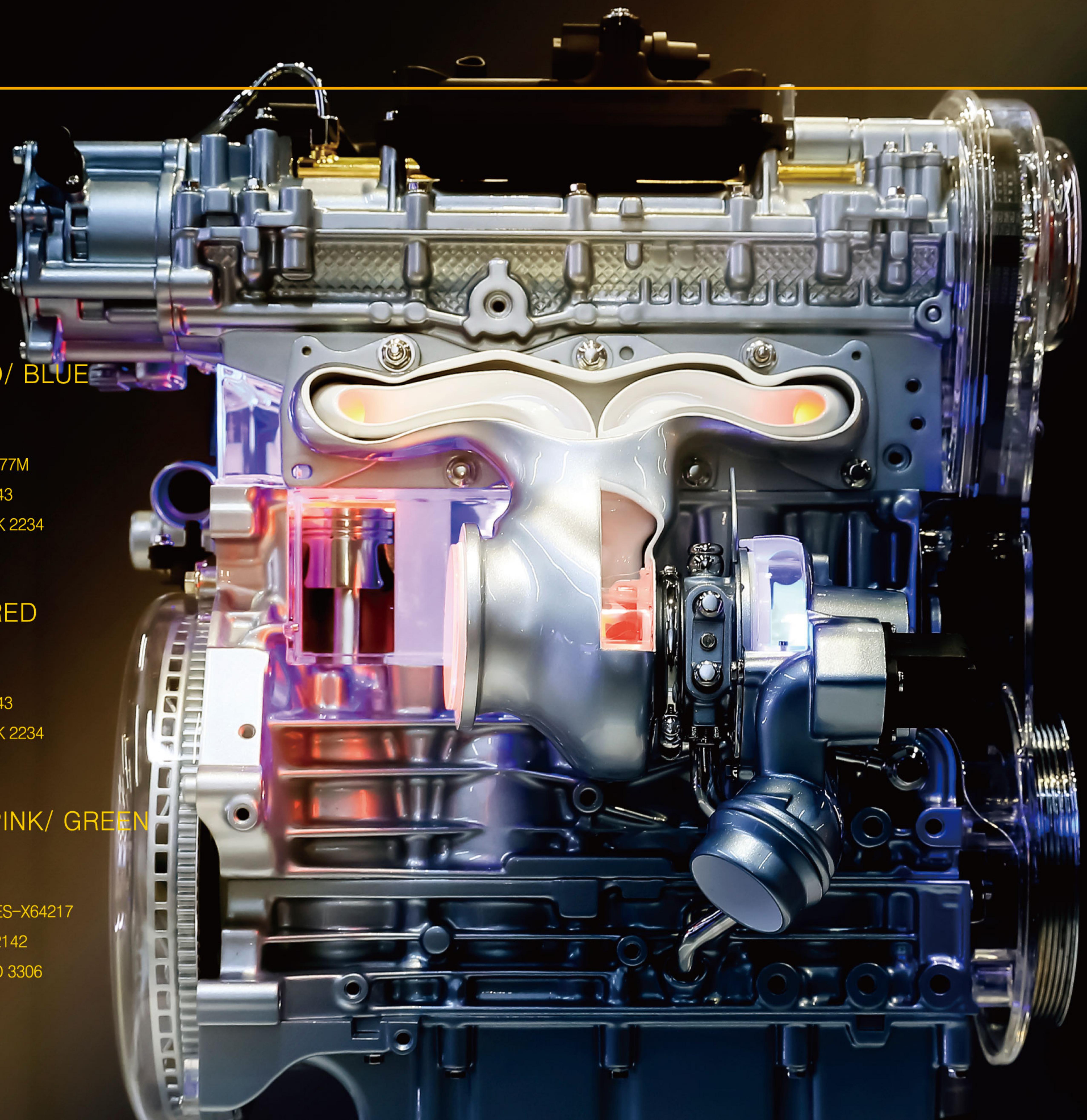
PAT COOLANT LONG LIFE - GREEN

## Organic Acid Type COOLANT-RED/ BLUE

- Long service life 5 years or 200,000 km

### MEETS OR EXCEEDS REQUIREMENTS

- Ssangyong Motors/ SES-N-761 • General Motors/ GM 6277M
- Korea Standard/ KS M 2142 • Chinese Standard/ GB 29743
- ASTM Standard/ ASTM D3306 • Japanese Standard/ JIS K 2234



## Phosphate Acid Type COOLANT-RED

- 2 years or 4,000 km

### MEETS OR EXCEEDS REQUIREMENTS

- Korea Standard/ KS M 2142 • Chinese Standard/ GB 29743
- ASTM Standard/ ASTM D3306 • Japanese Standard/ JIS K 2234

## Phosphate Acid Type COOLANT-PINK/ GREEN

- Long service life 10 years or 200,000 km

### MEETS OR EXCEEDS REQUIREMENTS

- HYUNDAI KIA Motors / MS 591-08 • Mitsubishi Motors/ ES-X64217
- Mazda Motors/ MES MN 121K • Korea Standard/ KS M 2142
- Chinese Standard/ GB 29743 • ASTM Standard/ ASTM D 3306
- Japanese Standard/ JIS K 2234

## COOLANT



# INDUSTRIAL OILS

## HYDRAULIC OIL

KSO hydraulic fluid is the highest performing hydraulic fluid and contains rust, oxidation, and foam inhibitors suitable for hydraulic systems in various industries and vehicles. It is a product that can be used as an environmentally friendly hydraulic oil and general-purpose industrial machine oil manufactured by adding it.

### Product use

- Various hydraulic equipment For light and heavy-duty gear devices, bearing lubrication areas, various industrial equipment and circulation machines requiring corrosion and oxidation prevention performance
- Reducers that do not require wear resistance or extreme pressure performance
- Various pumps requiring rust and oxidation prevention performance
- All hydraulics other than high pressure

## INDUSTRIAL GEAR OIL

KSO gear oil is mainly a sealed type of industrial extreme pressure gear oil series. Excellent abrasion resistance and anti-wear properties by using the highest grade additives, It is the best gear oil with strong oxidation stability, excellent corrosion prevention and bubble prevention performance.

### Product use

- All types of industrial gears and vehicle equipment requiring extreme pressure
- Reduction device for large high-power devices such as rolling mills and cement and mine hoists
- Sealed gear unit, chain drive unit
- Plain and rolling element bearings, slide guides and flexible couplings, etc.



## MACHINE OIL

KSO machine oil is the best high-speed spindle oil made using highly refined paraffin oil and carefully selected additives, especially when used in textile factories. Overall power consumption can be reduced.

### Product use

- Spindles of weaving machines, machines operating at high speed, etc.
- Used in places where high temperature and load conditions are not extreme
- Applicable to sealed gearboxes, plain bearings, and rolling bearings using various types of gears, including worm gears, (Where additive-free pure mineral oil is recommended)

## TURBINE OIL

KSO turbine oil is the highest grade turbine oil manufactured to be suitable for various turbines used for modern power generation, industry, and ships. It is a high-performance turbine oil manufactured by using a special non-volatile ash-free additive to a highly refined, high-quality base oil for fortification.

### Product use

- Recommended for various high-load turbines (for power generation, industrial use, railway vehicles, ships, steam turbines, hydro turbines)
- A turbine system that simultaneously lubricates the servo valve in addition to lubricating the bearing of the turbine
- Turbine where hot sludge generation is a problem
- Various compressors in non-severe conditions such as compression of air and inert gas

# INDUSTRIAL OILS

## SLIDING SURFACE OIL

KSO sliding surface oil is a special lubricant developed for sliding surfaces of machine tools by adding carefully selected base oil and special additives. Seamless of machine tools To prevent operation and stick slip phenomenon, it contains friction coefficient adjusting agent and extreme pressure additive, and contains abrasion and corrosion inhibitor. It contains special additives that make it sticky and prevents the lubricant from dripping from the sliding surface or guide surface.

### Product use

- Surface grinder mills, lathes and other machine tools
- Used for sliding surfaces and guide surfaces of machine tools

## THERMAL OIL

KSO thermal medium oil has excellent thermal stability at high temperatures, so there is less generation of thermal decomposition products, and high oxidation stability minimizes the generation of oxidized sludge. It facilitates oil circulation and helps to improve productivity due to its low evaporation and long lifespan. In particular, because of its high flash point, The risk is low.

### Product use

- Reactor, heating, cooling for chemical, paint, metal, food, textile, pharmaceutical companies, etc.
- Sealed system: In order to guarantee the long life of the oil in the system, the temperature of the bulk oil is up to 315°C, and the maximum oil film temperature on the heater surface is Usable up to about 335°C
- Open type expansion tank: In this system, the oxygen in the air and the heat medium oil come into direct contact, and oxidation proceeds quickly, so the oil film temperature is lowered to 200°C Use limited to

## COMPRESSED OIL

KSO COMPRESSOR OIL RS Series (reciprocating type) is recommended for reciprocating air compressors or centrifugal compressors with a pressure of 1000 bar or more. It is a high-quality product with high-quality base oil and special additives added. It also removes sludge, varnish, and carbon materials from oxidation products generated at high pressure and high temperature. Prevents it as much as possible to prolong the life of the equipment.

### Product use

- Single-cylinder and multi-cylinder reciprocating air compressors or centrifugal compressors operating at 1000 bar
- Air or inert gas reciprocating compressor
- Stationary and semi-portable, portable compressors

KSO COMPRESSOR OIL SP Series (rotary type) is a high-performance mineral oil-based compressor oil.

It has anti-corrosive properties and water separation properties, and especially, it has excellent oxidation stability and extends the life of the equipment.

### Product use

- rotary screw air compressor
- sliding vane air compressor



# GREASE

Extreme pressure grease is formulated with additives which provide good film strength under extreme pressure.

GREASE GP 0

GREASE GP 1, 2, 3

EP GREASE GP 0

EP GREASE GP MOLY2

EP GREASE GP HT2

EP GREASE GP 0, 1, 2, 3

R EP 2

R EP 3

Li-Complex 2

Moly 2

Graphene 2

EP GREASE GP 0, 1, 2, 3

## Product Specifications

- Excellent extreme pressure
- Excellent abrasion
- Excellent oxidation stability
- Excellent anti-corrosion performance
- Excellent anti-rust performance
- Excellent water resistance

## Product use

- Centralized refueling system
- Use where extreme pressure is required
- concrete pump car
- Grease for wheel bearings
- Automobile parts that use grease, such as ball joints and universal joints
- Construction equipment/ Various heavy equipment
- Automotive constant velocity joint



HELLA KGaA Hueck & Co.

# ADDITIVES

ENGINE OIL ADDITIVE

FUEL ADDITIVE



Graphene, the dream material that won the 2010 Nobel Prize in Physics,  
and The meeting of KSO engine oil coating agent.  
KSO's patented technology has made a dream a reality.



PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL	PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel 1L/ 4L/ 6L/ 200L	0W16	API SP, ILSAC GF-6B	<b>LEMANS GT ULTRA</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W30	API SN, ACEA C2
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W20	API SN, ACEA C5, MB229.71, STJLR.51.5122	<b>LEMANS GT ULTRA</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W20	API SN, ACEA C2
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W20	API SN/CF, ACEA C2	<b>LEMANS GT ULTRA</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30	API SN, ACEA C2, C3, MB 229.51/229.31/229.52, BMW Long life-04, VW 502 00/505 00/505 01, GM Dexos2
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W30	API SN/CF, ACEA C2	<b>LEMANS GT ULTRA</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W40	API SN, ACEA C3, MB 229.31/229.51, BMW Long-life – 04, GM dexos 2, VW 502 00/505 00/505 01, Porsche A40
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W30	API SN, ACEA C2, STJLR.03.5007, Ford WSS-M2C950-A	<b>X-VANCE GP 7000</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	0W16	SP, ILSAC GF-6B
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ LPG 1L/ 4L/ 6L/ 200L	0W40	API SN, ACEA A3/B4, BMW Longlife-01, Porsche A40, VW 502 00/505 00, Ford WSS-M2C937-A, Renault RN0700, 0710	<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	0W20	API SP, ILSAC GF-6A
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30	API SN, ACEA C3, MB 229.51/229.31/229.52, BMW Long life-04, VW 502 00/505 00/505 01, GM Dexos2	<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	0W30	API SP, ILSAC GF-6A
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30	ACEA C1, STJLR.03.5005, Jaguar & Landrover	<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	5W20	API SP, ILSAC GF-6A
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30	ACEA C4, Renault RN0720, MB226.51, MB & RENAULT	<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	5W30	API SP, ILSAC GF-6A
<b>LEMANS F1 PAO</b> Fully Synthetic add with PAO Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W40	API SN, ACEA C3, MB 229.31/229.51, BMW Long-life – 04, GM dexos 2, VW 502 00/505 00/505 01, Porsche A40	<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	5W40	API SP
<b>LEMANS GT ULTRA</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	0W20	API SN, ACEA C5, MB229.71, STJLR.51.5122			

PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL	PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL
<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	10W40	API SP	<b>SAHALA GRAND PRIX CK4(LONG LIFE)</b> Fully Synthetic 1L/ 4L/ 6L/ 200L	5W30	E6, E4, E9, E7, CJ-4, JASO DH-2, MB228.51, 228.31, MAN M3477, M3575, 3271-1, M3677, M3691, Scania LDF-4, Scania Low Ash, MTU 3.1, 2.1, Volvo VDS-4, VDS-3, CAT ECF-3, Cummins CES 20081, Mack EO-O Premium Plus, EO-N Premium Plus, Renault RLD-3, RLD-2, Deutz DQC IV-10 LA, DQC-III-10 LA, Detroit Diesel 93K218
<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	15W40	API SP	<b>SAHALA GRAND PRIX CK4(LONG LIFE)</b> Fully Synthetic 1L/ 4L/ 6L/ 200L	10W40	E6, E4, E9, E7, CJ-4, MB228.51, MAN M3477, M3575, 3271-1, MTU 3.1, 2.1, Volvo VDS-4, VDS-3, CAT ECF-3, Cummins CES 20081, Mack EO-O Premium Plus, EO-N Premium Plus, Renault RLD-3, RLD-2, Deutz DQC IV-10 LA, DQC-III-10 LA, Detroit Diesel 93K218
<b>LEMANS GRAND TOURING</b> Fully Synthetic Gasoline/ LPG 1L/ 4L/ 6L/ 200L	20W50	API SP	<b>SAHALA GRAND PRIX CK4(LONG LIFE)</b> Fully Synthetic 1L/ 4L/ 6L/ 200L	15W40	E6, E4, E9, E7, CJ-4, MB228.51, MAN M3477, M3575, 3271-1, MTU 3.1, 2.1, Volvo VDS-4, VDS-3, CAT ECF-3, Cummins CES 20081, Mack EO-O Premium Plus, EO-N Premium Plus, Renault RLD-3, RLD-2, Deutz DQC IV-10 LA, DQC-III-10 LA, Detroit Diesel 93K218
<b>LEMANS LAND SPEED</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30 NON DPF	ACEA A3/B3/B4 MB 229.3 VW 502 00 / 505 00	<b>SAHALA GRAND PRIX CK4</b> Fully Synthetic 1L/ 4L/ 6L/ 200L	10W40	API CK-4, ACEA E9, MB 228.31, Cummins CES 20086, Volvo VDS-4.5, Mack EO-S-4.5, MTU 2.1, Renault RLD-4, Detroit Diesel DFS93K222, Caterpillar ECF-3, Deutz DQC III, Ford WSS-M2C171-F1
<b>LEMANS LS PLUS</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W30	API SN Plus, ACEA C2, C3	<b>SAHALA GRAND PRIX CK4</b> Fully Synthetic 1L/ 4L/ 6L/ 200L	15W40	API CK-4, ACEA E9, Cummins CES 20086, Detroit Diesel DFS93K222, Mack EO-S-4.5, Volvo VDS-4.5, CAT ECF-3, FORD WSS-M2C171-F1, MB 228.31, Renault Truck RLD-4, MTU Type 2.1, Deutz DQC III
<b>LEMANS LS PLUS</b> Fully Synthetic Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W40	API SN Plus, ACEA, C3	<b>SAHALA PT41 CJ4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	10W40	API CJ-4/SN, ACEA E9/E7, CAT ECF-3/2/1A, Cummins CES 20081/77/76, Detroit Diesel DFS93K218, MAN M3575, MB 228.31, Mack EO-O Premium PLUS, EO-N Premium PLUS, EO-M PLUS, MTU Category 2.1, Renault RLD-3, Volvo VDS-4, VDS-3
<b>LEMANS X-DURANCE</b> Synthetic Technology Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	5W40	API SL	<b>SAHALA PT41 CJ4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	15W40	API CJ-4/SN, ACEA E9/E7, CAT ECF-3/2/1A, Cummins CES 20081/77/76, Detroit Diesel DFS93K218, MAN M3575, MB 228.31, Mack EO-O Premium PLUS, EO-N Premium PLUS, EO-M PLUS, MTU Category 2.1, Renault RLD-3, Volvo VDS-4, VDS-3
<b>LEMANS X-DURANCE</b> Synthetic Technology Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	10W40	API SL	<b>SAHALA Rally CI4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	10W40	API CI-4/SL, ACEA E7, ACEA A3B4, MB 228.3, 229.1, VDS-3Renault Truck, RLD-2, Mack EO-N, EO-M Plus, MAN M 3275, Cummins CES 20076/20077/20078, CAT ECF-2, ECF-1-a, MTU Type 2, Deutz DQC III-10, Detroit Diesel DDC 93K215, Global DHD-1
<b>LEMANS X-DURANCE</b> Synthetic Technology Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	15W40	API SL	<b>SAHALA Rally CI4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	15W40	API CI-4/SL, ACEA E7, ACEA A3B4, MB 228.3, MAN 3275, Volvo VDS-3, Deutz DQC-III, MTU 2.0, Mack EO-N, Mack EO-M+, Cummins CES 20078, 20077, Caterpillar ECF-2, ECF-1a, Renault RLD-2, JASO DH-1,Global DHD-1, DDC 93K215
<b>LEMANS X-DURANCE</b> Synthetic Technology Gasoline/ Diesel/ LPG 1L/ 4L/ 6L/ 200L	20W50	API SL	<b>SAHALA Rally Cross CF4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	10W30	API CF-4/SG
<b>LEMANS DURANCE</b> Synthetic Technology Gasoline/ LPG 1L/ 4L/ 6L/ 200L	5W30	API SP	<b>SAHALA Rally Cross CF4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	10W40	API CF-4/SG

PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL	PRODUCT NAME	SAE VISCOSITY	API/ ACEA/ ILSAC/ OEM PERFORMANCE LEVEL
<b>SAHALA Rally Cross CF4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	15W40	API CF-4/SG, ACEA E1, MB 227.0/227.1	<b>KSO 2T</b> Synthetic Technology 1L/ 4L/ 20L	20	Meets JASO FB the Global GB category and API TC for air-cooled two-stroke engines
<b>SAHALA Rally Cross CF4</b> Synthetic Technology 1L/ 4L/ 6L/ 20L/ 200L	20W50	API CF-4/SG, ACEA E1, MB 227.0/227.1	<b>KSO 4T</b> Synthetic Technology 1L/ 4L/ 20L	10W40	API SL, JASO MA/MA2
<b>PRODUCT NAME OEM PERFORMANCE LEVEL</b>					<b>GEAR OIL GL4</b> Synthetic Technology 1L/ 20L
<b>ATF3</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	DEXRON-IIH, MERCON, Allison C4		<b>GEAR OIL GL5</b> Synthetic Technology 1L/ 20L	75W85	API GL-4, Commercail Vehicle
<b>ATF SP-4</b> Fully Synthetic 1L/ 4L/ 20L/ 200L	GM DEXRON-VI, FORD MERCON LV, Hyundai SP-IV/SPH-IV/SP-IV-RR, Hyundai/Kia NWS-9638 T5, P/N 040000C90SG, Bentley P/N PY112995PA, BMW/MINI P/N 83 22 0 142 516, BMW/MINI P/N 83 22 0 397 114/ 163 514, BMW/MINI P/N 83 22 2152426, Land Rover P/N TYK500050, P/N LR0022460, Maserati P/N 231603, Porsche P/N 000 043 304 00, Saab P/N 93 165 147 AW 1, VW/Audi G 052 533, 055 005 (-A, A2), VW/Audi G 055 540 (A2), VW/Audi G 055 162 (A2/A6), VW/Audi G 060 162 A1/A2/A6, Chrysler/Dodge/Jeep P/N 051 27382AA, Chrysler/Dodge/Jeep P/N 680 43742AA, Chrysler/Dodge/Jeep P/N 68157995AA, Jaguar Fluid 8432, Honda DW-1, Mazda FZ, Mitsubishi ATF-J3, Toyota Type WS, Nissan Matic S		<b>GEAR OIL GL5</b> Synthetic Technology 1L	75W90	API GL-5, Commercail Vehicle
<b>ATF P8</b> Fully Synthetic 1L/ 4L/ 20L/ 200L	JASO 1-A-LV, Audi G 055 005, G 055 162, BMW 83 22 0 142 516, 83 22 2 152 426, MB 236.12, 236.14, 236.15, 236.41, Saab 93 165 147, VW G 052 540, G 055 005, G 055 162, Hyundai/Kia SP-IV, SPH-IV, SP-IV RR, NWS-9638. Aisin Warner AW-1, Honda DW-1, JWS 3324, Mitsubishi ATF-J2, SP-IV, Nissan Matic S, Matic W, Toyota WS (JWS 3324)		<b>GEAR OIL GL4</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	80W90	API GL-4, MIL-L-2105, ZF TE-ML 02A, ZF TE-ML 08 ZF TE-ML 17A
<b>ATF ZF FORMULA 6/8/9</b> Fully Synthetic 1L/ 4L/ 20L/ 200L	• ZF TE-ML 11 • ZF LifeguardFluid 6 (ZF No. S671 090 255) - Audi / VW Oil No. G 055005 A1 / A2 / A6 - Bentley Oil No. PY112995PA - BMW Oil No. 8322 0142516 - Hyundai Oil No. 040000C90SG - Jaguar Oil No. Jagual Fluid 8432 - Land Rover Oil No. TYK500050 - Maserati Oil No. 231603 • ZF LifeguardFluid 8 (ZF No. S671 090 312) - Audi / VW Oil No. G 060162 A1 / A2 / A6 ATF - BMW ATF 3+, Oil No. 83 22 2 289 720 - Jaguar Oil No. 02JDE 26444 - Land Rover Oil No. LR023288 - Chrysler Oil No. 68157995AA • ZF LifeguardFluid 9 (ZF No. AA01.500.001) - BMW ATF 3+, Oil No. 83 22 2 289 720 - Honda ATF-Type 3.1.: 08263-999-01HE (EU), 08200-9017(USA) - Jaguar Oil No. 02JDE 26444 - Land Rover Oil No. LR023288		<b>GEAR OIL GL5</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	80W90	API GL-5, MIL-L-2105D, ZF TE-ML 08
<b>DSG</b> Fully Synthetic 1L/ 20L	Volkswagen/Audi P/N G 052 180 (-A2), Volkswagen/Audi P/N G 052 516 A2, Chrysler Mopar CVTF+4, P/N 05191184AA Ford Motocraft P/N XT-7-QCFT, Spec. WSS-M2C933-A, Ford MERC C, CVT23, CFT30, Honda CVTF, P/N 08200-9006, HMMF [Without starting clutch], Mini P/N 83 22 0 136 376, EZL 799, Mini EZL 799A, ZF CVT V1;, BMW P/N 83 22 0 136 376, 83 22 0 429 154, EZL799, EZL 799A; Punch EZL 799, EZL 799A, Mitsubishi Diamond Queen CVTF-J1, Nissan Matic W Nissan CVT Fluid NS-2, Nissan NS-1;, Dodge/Jeep NS-2; GM CVTF I-Green2! Suzuki NS-2! Renault ELFNATIC; Shell Green 1V Nissan CVT fluid NS-3, GM DEX-CVT Fluid, Saturn P/N 22688912, Toyota Genuine CVT Fluid TC; suzuki VTF 3320, TC; Daihatsu Amix CVTF-DTC; Mazda CVTF 3320, Subaru CVTF for Lineartronic, P/N K0425Y0710, e-CVT, i-CVT, CV-30, Suzuki CVT Fluid Green 1, CVT Fluid Green 2*, Mitsubishi Diamond Queen CVTF-J4*, GM ACDelco CVT Fluid P/N 19260800, TOYOTA Genuine CVT Fluid type FE*, Daihatsu Amix CVTF-D FE*, Honda Genuine HCF-2 Transmission fluid P/N 08200-HCF2, Subaru High Torque CVT oil P/N K0421Y0700, Subaru CVTF for Lineartronic II, P/N K0425Y0711, Hyundai / Kia (SP-CVT 1) Mercedes Benz CVT28/MB-Approval 236.20		<b>GEAR OIL LSD</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	80W90	API GL-5, MT-1, ArvinMeritor 076-D, Ford WSP-M2C197-A, Scania STO 110
<b>DCT</b> Fully Synthetic 1L/ 20L	VW G 052 182 A2, BMW P/N 83220440214		<b>GEAR OIL GL5</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	85W140	API GL-5, MIL-L-2105D, ZF TE-ML 08
<b>CVT</b> Fully Synthetic 1L	Audi G 052 180 A2, Honda HCF-2, Nissan NS-2, Subaru CVTF Lineartronic, Toyota CVTF-FE		<b>GEAR OIL GL5</b> Synthetic Technology 1L/ 4L/ 20L/ 200L	140	API GL-5, MIL-L-2105D, ZF TE-ML 08

PRODUCT NAME	OEM PERFORMANCE LEVEL	PRODUCT NAME	OEM PERFORMANCE LEVEL
<b>DOT 3</b> 1L	Recommended for older vehicles	<b>HYDRAULIC OIL HVI 15, 32, 46, 68</b> 20L/ 200L	ISO Standard 6742 Part 4, HV Type, DIN 51524 Part3
<b>DOT 4</b> 1L	Highest safety standards with most common brake fluids	<b>HYDRAULIC OIL AW 32, 46, 68, 100, 150</b> 20L/ 200L	Anti-wear type (AW Type), Parker Hannifin France HF-0, Eaton Vickers M-2950-S, I-286-S, Cincinnati Miracron P-68, P-69, P-70, GM LS-2, JCMAS HK, DIN 51524 Part 2, U.S. Steel 127. 136, Bosch Rexroth
<b>DOT 4 LV</b> 1L	Low viscosity and strong durability. Advanced with ESP and ABS Recommended for all vehicles with safety systems	<b>HYDRAULIC OIL MP 32</b> 20L/ 200L	General purpose(R&O Type), Parker Hannifin France HF-1, DIN 51524 Part 1, General hydraulic system, oil circulation system, compressor & bearing oils
<b>DOT 5.1</b> 1L	For high-performance vehicles that meet the highest standards and have ABS and ESP, etc. guarantee the safety	<b>GRAR EP 68, 100, 150, 220, 320, 460, 680, 1000</b> 200L	AGMA 9005-E02, ISO 12925-1 CKC, ISO6743 - 6 CKC, AIST 224, DIN 51517 Part III, FOR INDUSTRIAL GEAR OIL
<b>LHM</b> 1L	Mineral oil for the central hydraulic system of Citroën vehicles	<b>MACHINE 32, 100, 150, 220, 320, 460</b> 200L	Multi-purpose industrial oil
<b>OAT COOLANT-RED</b> 3L/ 18L/ 200L	Long service life 5 yrs or 200,000km FOR VW	<b>TURBINE OIL 32, 46, 68, 100</b> 200L	Denison HF-1, HF-0, Cincinnati Miracron P-68, P-69, P-70, DIN 51524 Part 2, U.S. Steel 127. 136, Ford-M-6C32, B.F. Goodrich 0512, AFNOR E 48-603
<b>OAT COOLANT-BLUE</b> 3L/ 18L/ 200L	Long service life 5 yrs or 200,000km FOR MB, BMW	<b>KSO WAY 32</b> 20L/ 200L	Slideway and hydraulic oil for lightly loaded machining equipments , FOR SLIDWAY
<b>PAT COOLANT</b> 3L/ 18L/ 200L(50%)/ 200L	2 yrs or 40,000km ASTM D 3306	<b>KSO WAY 68</b> 20L/ 200L	Slideway oil for medium and heavy loaded equipments Fives Cincinnati P-47, FOR SLIDWAY
<b>PAT COOLANT-PINK</b> 3L/ 18L/ 200L	Long service life 10 years or 200,000km FOR MEG LONG LIFE	<b>KSO WAY 220</b> 20L/ 200L	Vertical or heavily loaded slidway oil Fives Cincinnati P-50, FOR SLIDWAY
<b>PAT COOLANT-GREEN</b> 3L/ 18L/ 200L	Long service life 10 years or 200,000km FOR MEG LONG LIFE	<b>THERM OIL 32, 46</b> 20L/ 200L	Various kinds of oil application for heat transfer
		<b>COMPRESSOR OIL RS 32, 46, 68/ SP 32, 46, 68</b> 20L/ 200L	Reciprocating type compressors DIN 51506 VDL/ Rotary type compressors DIN 51506 VDL

PRODUCT NAME	OEM PERFORMANCE LEVEL	PRODUCT NAME	OEM PERFORMANCE LEVEL	
<b>GREASE GP 0</b> 15kg	NLGI 0	<b>KSO ETHANOL WASHER FLUID</b> 1.8L/ 18L		WASHER FLUID PASSENGER VEHICLES ADDITIVES COMMERCIAL VEHICLES ADDITIVES CAR CARE FLUID
<b>GREASE GP 1, 2, 3</b> 15kg/ 180kg	NLGI 1, NLGI 2, NLGI 3	<b>Engine Oil Additive</b> 280ml	PC add Graphene and Black Diamond	
<b>EP GREASE GP 0</b> 15kg	NLGI 0	<b>Fuel Additive</b> 50ml/ 120ml	Gasoline_ RED/ Diesel_ BLUE	
<b>EP GREASE GP MOLY2</b> 15kg	NLGI 2	<b>Engine Oil Additive</b> 300ml/ 500ml	HCV_Premium add Graphene and Black Diamond	
<b>EP GREASE GP HT2</b> 180kg	NLGI 2	<b>Fuel Additive</b> 250ml/ 500ml/ 1,800ml	Gasoline_ RED/ Diesel_ BLUE	
<b>EP GREASE GP 0, 1, 2, 3</b> 15kg/ 180kg	NLGI 1, NLGI 2, NLGI 3	<b>MICRO CRYSTAL MAGIC</b> 300ml/ 500ml	Beauty Coating for Lasting Shine	
<b>R-EP 2</b> 15kg/ 180kg	NLGI 2			
<b>R-EP 3</b> 15kg/ 180kg	NLGI 3			
<b>Li-Complex 2</b> 15kg/ 180kg	NLGI 2			
<b>Moly 2</b> 15kg/ 180kg	NLGI 2			
<b>Graphene 2</b> 15kg/ 180kg	NLGI 2			

GREASES