



FORZA RAYGOLD

SAE 15W-40 API CK-4

Forza RayGold is a high performance multigrade lubricant recommended for modern diesel engines in severe working conditions. Developed with severely hydrotreated paraffinic oils perfectly balanced with Copolymer additive and a recent package of state-of-the-art additives. Its special formulation contributes to new technologies for fuel economy, emission control, such as the high pressure common rail fuel system, as well as the treatment of exhaust gases by Diesel Oxidation Catalyst (DOC), Selective Reduction (SCR), by Gas Recirculation (EGR), diesel particulate filters (DPF), also an effective control of oxidation, aeration and shear stability.

USES

Recommended in turbocharged European, American and Asian OEM's four-stroke diesel engines, in which API CK-4 and SAE 15W40 service in viscosity grade is recommended. This oil allows meeting the requirements of fuel efficiency, changes in design and technology of engines, after-treatment systems SCR, DPF, EGR that are used in buses, trucks and heavy-duty units for earthmoving and others. This recent API CK-4 service level is suitable for diesel fuel with sulfur content up to 500 ppm.

PROPERTIES

- Improved oxidation control, demonstrated in compliance with the new Mack T-13 test requirement, at high working temperatures for latest generation diesel engines.
- Ultra antiwear protection, with special focus on compression rings, cylinder liner polishing, camshaft and piston, improving engine durability.
- Excellent viscosity stability against shear in severe working conditions.
- Excellent control of combustion deposits, allowing less oil consumption.
- Excellent aeration control, keeping the lubricant film stable, against bubble formation during engine operation.
- Designed to meet the emission requirements of EPA10 Tier 4B and Euro VI, Euro V, Euro IV and earlier standards.

SPECIFICATIONS

Approved for the Service category: API CK-4 Meets and exceeds the Service categories:

- CJ-4, CI-4 Plus, CI-4 and CH-4.

European sequence:

- ACEA E9, E7, E2, ISSUE 4

Asian Specification:

- JASO DHD-1, JASO DH-2

Meets the requirements of OEMs:

- Volvo VDS 4.5
- Mercedes Benz 228.31
- Mack EOS-4.5, EO-O Premium plus
- Cummins CES 20086, 20081
- Detroit Diesel Corporation 93K222, 93K218
- Renault RLD-4, RLD-3
- Caterpillar ECF-3
- Deutz DQC II - 10 LA

HEALTH AND SAFETY

This product does not present a health or safety risk as long as good personal and industrial hygiene practices are maintained. In case of contact with the skin, wash immediately with soap and water.

Wear gloves to handle used oils. Do not dispose of the residue down the sewer. Take care of our environment.



TYPICAL PROPERTIES

PHYSICOCHEMICAL TESTS	UNIT	METHOD	AVERAGE VALUES
SAE grade		SAE J 300	15W-40
API service		SAE J 183	CK-4
Kinematic Viscosity @ 40°C	cSt	ASTM D-445	116
Kinematic Viscosity @ 100°C	cSt	ASTM D-445	15.4
Viscosity index		ASTM D-2270	139
Cold Viscosity CCS	cPs	ASTM D-5293	5.350
Flashpoint	°C	ASTM D-92	235
Pour point	°C	ASTM D-97	-32
Density @ 15C	Kg/L	ASTM D-4052	0.871
Total Basic Number, TBN	Mg KOH/g	ASTM D-2896	10.2
Sulphated ash	% w/w	ASTM D-874	1.0

In the batches manufactured there may be slight variations in the average values, which do not affect the quality or the performance of the product.

AVAILABLE SIZES

FORZA RAYGOLD 15W-40

2.5 gal bucket
5.785 gallon
5 gallon bucket
55 gal cylinder