

THE VALUES SHOWN REFER TO NORMAL INDUSTRIAL PRODUCTION. THEY ARE APPROXIMATE AND SUBJECT TO POSSIBLE VARIATIONS AND IMPROVEMENT AND DO NOT CONSTITUTE TECHNICAL SPECIFICATION.



PROPERTIES

Conceived in accordance with the latest lubrication standards, **SYNECO K14** performs its function interacting with the engine's moving parts and reducing the coefficient of friction up to 80%.

Its chemical-physical characteristics allow it to anchor to metal, creating a very firm layer that can endure operating temperatures up to three/four times greater, compared to the thermal stability of lubricants commonly sold, and so prevent wear during cold starts.

SYNECO K14 can also blend with normal lubricating oils of any type and brand, operating under various thermal conditions, even in the presence of extreme pressures.

Using **SYNECO K14** allows to reduce wear and corrosion phenomena, tripling the service life of touching surfaces.

APPLICATIONS

The product is suitable for use on heavy-duty diesel engines that require the following specifications: ACEA E4,E7-08, API CI-4,MB 228.5, MAN 3277 and **MAN 3377**, VOLVO VDS 3, RENAULT RXD/RLD-2, MTU TYPE 3, DEUTZ DQC IV-10, Mack EO-MPlus, Cummins CES 20078, Global DHD-1, Detroit Diesel 93K215.

TECHNICAL CHARACTERISTICS

CHARACTERISTIC	UNIT	VALUE	METHOD
Specific weight at 15°C	Kg/l	0.870-0.890	ASTM D1298
Viscosity at 100°C	cSt	19-22	ASTM D445
Viscosity at 40°C	cSt	190-220	ASTM D445
Viscosity index		115-125	ASTM D2270

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NOTES

As smooth and polished as they may be, metal surfaces are actually a mass of asperities; observing them through a microscope is all it takes to discover these invisible yet real "mountains". Due to these micro asperities, the moving units of an endothermic engine are subject to continuous and strong friction that reduces hydro-dynamic lubrication to mere boundary lubrication. The microscopic points in contact with each other rub against one another reciprocally without protection, causing physical wear and, for fractions of a second, the temperature can reach even 1000°C.

It is commonly known that a normal lubricant, even if heavily additivated, breaks down by pyro decomposition at about 290°C.

The separation of hydrogen from carbon, besides causing physical wear, creates the basis for chemical wear, since hydrogen can interact with other elements to form dangerous acids.

Only a thin lubricating layer that can last as long as possible at operating temperature (at least up to 800°C) and is capable of anchoring firmly to metal can prevent this serious phenomenon.

This kind of extreme protection can be provided only by **SYNECO K14**.

This special product, that complements the physical-chemical qualities of all the lubricants normally used in engines, allows to triple the service life of moving parts that are exposed -due to the structure of the engine itself- to the heat generated in the combustion chamber.

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