



Shell Rimula Signia

Ultimate technology for Euro 4 and 5 engines

Rimula Signia is fully synthetic heavy-duty diesel engine oil delivering outstanding performance and durability by using the latest unique scientific technology. Developed to provide the ultimate protection for the latest low-emission (Euro IV and V) heavy duty engines fitted with diesel particulate filter traps (and other exhaust after-treatment devices) as well as providing the ultimate performance and protection for older engines from Europe, USA and Japan

Applications

- **Ultimate European Diesel Engine Oil Performance**

Outstanding performance in automotive high-speed heavy duty diesel engines built in Europe and is particularly suited for use in Daimler Chrysler and MAN Euro IV engines. Designed for the latest Euro IV and V, 4-stroke diesel engines fitted with diesel particulate traps (and other exhaust after-treatment devices) under all operating conditions. Exceed the performance requirements of ACEA E6 as well as API CI4.

- **CNG Engine oil performance**

Rimula Signia is suitable for use in buses and trucks fitted with engines designed to run on 100% CNG but requiring relatively high TBN formulations in order to adequately control deposits and wear (i.e. MB, MAN and Volvo engines).

- **Recommended for American and Japanese engines**

Newly formulated Rimula Signia is recommended for use in Cummins, Mack, Caterpillar and most Japanese engines.

Performance Features and Benefits

- **Exceptional piston cleanliness**

Rimula Signia features a unique combination of additives to provide superior piston cleanliness giving a cleaner, more efficient and reliable engine. A notable feature of Rimula Signia is a low Total Base Number (TBN), which

physically demonstrates the new advanced technology used in this unique engine oil.

- **Shell's advanced base oil technology**

Unlike lower-quality "European" oils, Rimula Signia is formulated using only 'Shell XHVI' synthetic base stocks which provides an extremely high viscosity index. Shell XHVI has exceptional viscometric properties and resistance to high temperature oxidation and degradation, which is matched with a unique combination of additives to provide outstanding engine lubrication.

- **Reduced Wear - Extended engine life**

The wear protection of Rimula Signia has been optimised to exceed the demanding wear protection standards of a wide range of European, American and Japanese engines providing effective protection under all operating conditions. Rimula Signia is extremely effective at minimising bore polish and valve-train wear, thus maximising engine life and minimising costly downtime and maintenance.

- **Shear stable**

The extremely stable viscosity index improver used in Rimula Signia is highly resistant to viscosity shear. When subjected to heavy mechanical shearing action, this feature controls the viscosity of the oil throughout its service life, reducing oil consumption and minimising wear.

- **Fuel economy**

Rimula Signia 10W-40 can bring savings of up to 2% in fuel consumption, (compared to conventional SAE 15W-40 grades), without compromising on engine protection or increasing oil consumption.

- **Lower operating costs**
Rimula Signia makes a significant contribution towards reducing the operating cost of a vehicle through:
 - Reduced downtime
 - Sustained high performance for the life of the vehicle
 - Maximising particulate trap filter life
 - Fuel economy
 Maximising vehicle resale through demonstrated excellence in maintenance

Specifications and Approvals

ACEA	- E4, E6, E7
API	- CI-4, CH-4, CG-4, CF-4
Mercedes Benz	- 228.51, 228.5 and 226.9
MAN	- M 3477, 3277-CRT and 3271-1
DAF	- Meets ACEA E4 and E6.
Scania	- Meets ACEA E7
Volvo	- VDS-2 and Approved for use in Volvo CNG engines.
MTU	- Type 3
Cummins	- CES 20077
Mack	- EO-M +
CAT	- ECF-1
JASO	- DH-2 (*)

(*) meets the engine requirements

Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.

Health & Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Shell representative.

Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Typical Physical Characteristics

SAE Viscosity grade			10W-40
Kinematic Viscosity		ASTM D 445	
at 40°C	mm ² /s		82,0
at 100°C	mm ² /s		13,0
Dyn. Viscosity		ASTM D 5293	
at -25°C	mPa*s		6650
Density at 15°C	kg/m ³	ASTM D 4052	850
Flash Point COC	°C	ISO 2592	251
Pour Point	°C	ISO 3016	-36
TBN	mg KOH/g	ISO 3771	9,5
Sulphated Ash	%	ISO 3987	0,9

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.