

# Product Information

## COFRAN MARATHON MAX SAE 10W-40

**Premium Performance engine oil. Especially developed for vehicles with exhaust aftertreatment and turbocharger. Good cold start properties and excellent ageing stability for fuel economy throughout the drain interval.**

### Description

COFRAN MARATHON MAX SAE 10W-40 is a premium performance Low-SAPS engine oil for use in engines with or without turbocharger as well as with modern exhaust gas aftertreatment systems. COFRAN MARATHON MAX SAE 10W-40 provides optimum protection for modern diesel particle filters and catalysts, thus providing enhanced durability. Due to minimized evaporation loss, oil consumption is significantly reduced and deposits in the turbocharger are significantly reduced. COFRAN MARATHON MAX SAE 10W-40 provides excellent cold start properties and a fast oil circulation in the whole engine at low temperatures. COFRAN MARATHON MAX SAE 10W-40 also ensures complete lubrication when loads are at a maximum, thus ensuring protection against wear and corrosion. The carefully chosen base oil mix ensures outstanding low-temperature properties and an increased fuel economy potential. COFRAN MARATHON MAX SAE 10W-40 exceeds conventional UHPD lubricants in versatility and performance.

### Application

COFRAN MARATHON MAX SAE 10W-40 was specially developed for commercial vehicles with modern exhaust gas aftertreatment systems. COFRAN MARATHON MAX SAE 10W-40 completely fulfils all latest ACEA Ex specifications in combination with API CK-4. Based on its extensive performance profile COFRAN MARATHON MAX SAE 10W-40 is also ideally suitable as a

rationalisation product for vehicles of the late 90s and early 2000s.

COFRAN MARATHON MAX SAE 10W-40 is miscible and compatible with conventional, branded engine oils. However, mixing with other engine oils should be avoided in order to fully exhaust this product's benefits. A complete oil drain is recommended when converting to COFRAN MARATHON MAX SAE 10W-40. For information on product safety and proper disposal please refer to the latest Material Safety Data Sheet.

# Product Information

## Advantages

- Up to 0,6% additional reduction of fuel consumption compared to oils of the same viscosity grade.
- Significant reduction of residues in engines and turbochargers.
- Keeps fuel system and combustion chamber clean and deposit free.
- Provides environmental benefits due to reduced fuel consumption and longest oil drain intervals.
- Excellent ageing stability.
- Protects exhaust gas aftertreatment systems because of a low content of sulphated ash, phosphorus and sulphur (Low-SAPS).
- Excellent wear protection even under high loads.
- Provides high performance reserves even under extreme operation conditions.
- High neutralisation behaviour against acidic residues in combination with latest Low-SAPS technology.
- Fulfils all latest ACEA Ex specifications (ACEA E11, E8, E7, E4) in combination with API CK-4.
- Offers a wide application profile; excellent rationalisation product for mixed fleets.

## Recommendations

- ACEA E9, E6
- CUMMINS CES 20081
- CUMMINS CES 20086
- DETROIT DIESEL 93K218
- DETROIT DIESEL 93K222
- DEUTZ DQC IV-18 LA
- DTFR 15C100 (MB 228.31)
- DTFR 15C110 (MB 228.51)
- DTFR 15C120 (MB 228.52)
- IVECO 18-1804 CLASSE TLS E9
- IVECO 18-1809 CLASSE NG2
- LIEBHERR LH-00-ENG LA
- MACK EOS-4.5
- MAN M 3271-1
- MAN M 3477
- MAN M 3575
- MTU DDC TYPE 2.1
- MTU DDC TYPE 3.1
- RENAULT RLD-3
- RENAULT RLD-4
- SCANIA LA
- VOITH-RETARDER "B"
- VOLVO VDS-4.5

## Specifications

- ACEA E11, E8, E7, E4
- API CK-4/CJ-4
- CAT ECF-3
- JASO DH-1/DH-2/DL-0



# Product Information

## TYPICAL CHARACTERISTICS

SAE Grade	SAE J300	10W-40
Density at 15°C	DIN 51757	0.85 g/ml
Kinematic Viscosity at 40°C	ASTM D 445	90.4 mm <sup>2</sup> /s
Kinematic Viscosity at 100°C	ASTM D 445	13.8 mm <sup>2</sup> /s
Viscosity Index	ASTM D 2270	155
HTHS	CEC L-36-90	≥ 3,5 mPa.s
Pour point	ASTM D 7346	-33 °C
Sulphated Ash	ASTM D 874	≤ 1,0 %m/m
Product Dyeing		None



## Product Information

In all cases, to limit the risk of water contamination (including condensation), store drums and barrels horizontally. Do not expose packaging to strong sunlight or extreme temperatures. The information contained in this data sheet is based on FLF's experience and know-how in the development and manufacture of lubricants and other chemical products to the best of our knowledge. All chemical products must be used in the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). The performance of our products can be influenced by a range of factors, including conditions of use, application methods, operating environment, pre-treatment of components, possible external contamination, etc. For these reasons, a universal recommendation of our products is impossible. The information given in the data sheet represents general, non-binding guidelines and is provided for guidance only. No warranty, express or implied, is given concerning the properties of the product or its suitability for a given application. We therefore recommend consulting an application engineer to discuss application conditions and product performance criteria prior to use. It is the user's responsibility to test the functional suitability of the product and to use it under the appropriate safety conditions. Our products are subject to continuous improvement, with the aim of enhancing performance or bringing them into line with any new regulations. We reserve the right to modify our product ranges, our products and their manufacturing processes, as well as all the provisions of our publications, at any time and without prior notice. This data sheet cancels and replaces all previous editions. We expressly draw the attention of all users to the fact that our product has not been designed and tested for use in the nuclear and aeronautical fields ("embedded" product). Any use of our product in the aforementioned sectors is the sole responsibility of the user. Reproduction in any form requires the prior written consent of FLF, all rights reserved.