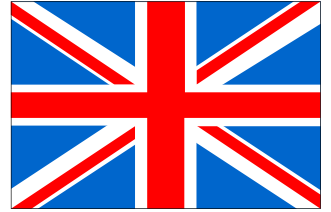


MAN



Fuels, Lubricants and Coolants for MAN Diesel Engines
Betriebsstoffe für MAN-Dieselmotoren
Sustancias de servicio para motores Diesel MAN
Ingrédients pour moteurs Diesel MAN
Materiali d'esercizio per motori Diesel MAN

Fuels, Lubricants and Coolants for
MAN Industrial and Marine Diesel Engines





Dear Customer,

MAN Diesel engines are developed to the state of the art and built using the latest production technology.

This results in significant properties such as:

- Economical operation owing to low fuel and lubricating oil consumption
- Low weight
- Limited extent of maintenance and spare part requirements and a high service life
- Future-oriented environmental compatibility
- Quick load pickup
- Compact design

However, trouble-free operation and high performance can be achieved only if the specified maintenance intervals are observed and the fuels, lubricants and coolants approved by MAN are used.

Please observe the guideline for the protection of the environment when handling fuels, lubricants and coolants.

Yours, faithfully,
MAN Nutzfahrzeuge Aktiengesellschaft
Nuremberg works

We reserve the right to make technical modifications in the course of further development.

© 2000 MAN Nutzfahrzeuge Aktiengesellschaft
Reprinting, copying or translation, even of extracts, is not allowed without written permission from MAN. All rights under the copyright law are strictly reserved by MAN.



Contents

| | Page |
|--|------|
| Guideline for the protection of the environment | 7 |
| Engine oils | 8 |
| Fuel | 11 |
| Coolants | 15 |
| Corrosion inhibitor according to MAN 248 | 17 |
| Approved engine oils | |
| Multigrade engine oils approved to works standard MAN 271 | 83 |
| High-performance diesel engine oils approved to works standard M 3275 | 91 |
| High-performance diesel engine oils approved to works standard M 3277 | 99 |
| Single-grade engine oils approved to works standard MAN 270 | 105 |
| Engine oils available on the US market | 109 |
| Approved antifreezes | |
| Antifreeze and anti-corrosion protection agents approved under MAN Works Standard 324 | 115 |



Fuels, lubricants and coolants are poisonous, inflammable and also harmful to the environment if they are not used properly. Do not allow them to seep into the ground or into the sewerage system. Hand used oil over to old oil disposal companies or dispose of them as special waste.

Comply with safety regulations.

Follow the instruction sheet for handling used engine oil.

Engine oil

- Hand old oil over to old oil disposal companies only.
- Ensure without fail that oil does not seep into the sewerage system and/or into the ground.
Caution:
Risk of contamination of potable water.

- Dispose of used filter elements and cartridges as special waste.

Coolant

- Dispose of undiluted anti-corrosion protection and/or antifreeze agents as special waste.
- The regulations of the respective local authorities must be observed when used coolant is disposed of.

Diesel fuel

- Ensure without fail that Diesel fuel does not seep into the sewerage system and/or into the ground.
Caution:
Risk of contamination of potable water.
- Dispose of used filter elements and cartridges as special waste.



Engine oils approved by MAN

The engine oils to be used for industrial and marine diesel engines must be approved to

- Works Standard MAN 271, see table on page 83
- Works Standard M 3275, see table on page 91
- Works Standard M 3277, see table on page 99

Single-grade engine oils (table on page 105)

SAE 30 or 40 single-grade engine oils to works standard MAN 270 should be used only if multi-grade engine oils are not available or if the use of single-grade oils is explicitly required.

Heed the operating temperature range.

High-performance diesel engine oils (table on pages 91 and 99)

High-performance diesel engine oils to works standards M 3275 (supersedes QC 13-017, table on page 91) and M 3277 (table on page 99) have a considerably higher performance level than engine oils to works standards MAN 270 (table on page 105) and 271 (table on page 83).

In supercharged diesel engines in particular, high-performance diesel engine oils bring major advantages in terms of piston cleanliness, wear and tear and power reserves.

In the interest of greater engine life expectancy we recommend using such oils for turbocharged and non-turbocharged engines.

Caution:

In high-performance marine Diesel engines extreme operating conditions (full-load operation and high air temperatures) may lead to deposits in the charge-air area that reduce the engine output.

The following engine models are high-performance marine Diesel engines.

- D 2866 TE, LE..
- D 2876 LE4..
- D 2848 LXE, LE4..
- D 2840 LXE, LE4..
- D 2842 LYE, LZE, LE2.., LE3.., LE4..

For these engines the following low-deposit engine oils are particularly recommended:

Worldwide (except for the USA):

- **All** approved M 3277 high-performance Diesel engine oils,
- MAN 270 SAE 30 and 40 single-grade Diesel engine oils.

As for the USA, also see table on page 109.

Conditions of approval

The approval for engine oils is valid for two years and can be extended by another two years at the request of the manufacturer / supplier provided that the quality of the oil in question has not changed.

Before purchasing a product, make sure that it is still approved by having the supplier produce the MAN letter of approval.

Engine oils without MAN approval

If in certain countries MAN-approved engine oils are not available, use only engine oils for which the manufacturer or supplier confirms in writing that their quality level complies at least with ACEA E2-96 (for MAN 270 / 271) or ACEA E3-96 (for M 3275) or API-CE, CF 4, CG 4 / SF, SG, SH.

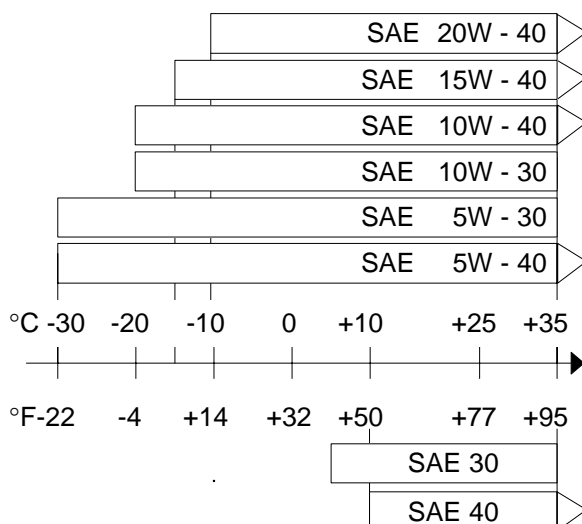
If these engine oils are used the oil change intervals stated in the Service Board Book / service booklet can be reduced by agreement.

Caution:

If the sulphur content is over 1.0%, the oil change intervals are to be halved.

SAE viscosity classes

SAE viscosity class is dependent on ambient air temperatures (see diagram).





Engine oils

Engine oil additives

The formula of the engine oils approved by MAN Nutzfahrzeuge Aktiengesellschaft as per MAN Works Standards 270, 271, M 3275 and M 3277 is such that they meet the demands of driving operations in every case, provided the specified oil change intervals are observed.

Any additives – no matter what kind – **subsequently** added to the engine oil result in changes which cannot be calculated and may cause damage to the engine.

Using such additives will render any warranty claim against MAN Nutzfahrzeuge Aktiengesellschaft null and void, if the damage depends on such additives.

Oil change intervals

The oil change intervals are stated in the Service Board Book / service booklet.

Diesel fuel satisfying the following specifications may be used in MAN engines:

- European norm EN 590
- DIN EN 590 (Germany)
- ÖNORM EN 590
- ASTM D 975 No. 1 D (USA)
- BS 2869 Part 1 Class A 1 (Great Britain)
- BS MA 100 DMX (Marine Diesel Fuel)

High / low sulphur content in Diesel fuel

Sulphur content above 1%

If the sulphur content is over 1%, the oil change intervals indicated in the Service Board Book / service booklet are to be halved.

Sulphur content below 0.05%

Low-sulphur Diesel fuels with a sulphur content of less than 0.05% may be used only if additives are added to ensure sufficient lubricity with a max. wear diameter of 460 µm (request written confirmation from supplier).

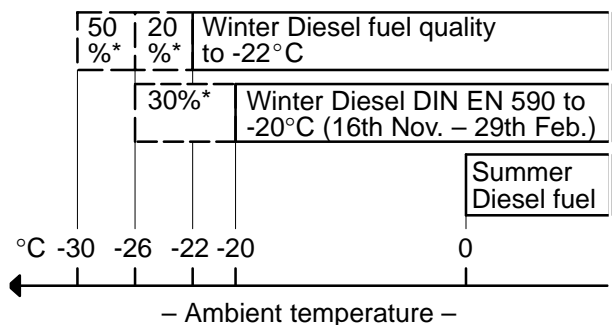
Winter operation

As ambient temperatures fall Diesel fuel deposits paraffin crystals which increase the flow resistance in the fuel filter so much that an adequate fuel supply is no longer guaranteed.

Summer-grade fuel to DIN EN 590 guarantees cold-flow behaviour down to 0°C, winter-grade fuel to DIN EN 590 to temperatures down to -20°C.

In Germany manufacturers of winter-grade Diesel fuel guarantee operational reliability down to -22°C over and above DIN N 590. There is no need to add kerosene at temperatures above -22°C.

If cold-flow behaviour is still not adequate or if ambient temperatures fall below -22°C, we recommend using an MAN fuel filter heater and / or adding kerosene.



* Recommended kerosene content of the mixture

Do not use gasoline!

In countries where even lower ambient temperatures are reached (Alpine or Arctic quality) special Diesel fuel is available.

Danger classes as per VbF (regulation for combustible fluids)

Applies only in the Federal Republic of Germany. Country-specific regulations must be observed.

Diesel fuel / RME:

Danger class A III (flash point above 55°C)

Number 30

Designation no. 1202

Petroleum:

Danger class A II (flash point 21°C to 55°C)

Number 30

Designation no. 1223

Diesel fuel additives

No fuel additives of any kind are necessary for the operation of MAN engines if the Diesel fuel meets the requirements of the above specifications. As the use of such additives may negatively affect the performance of the engine, the exhaust gas opacity, the emission of harmful substances, the extent of maintenance and the service life of the engines, any warranty claims against MAN Nutzfahrzeuge Aktiengesellschaft become null and void if the damage can be traced back to the use of such additives.

Use of biodiesel (vegetable oil methylester PME / RME)

MAN engines may be run on biodiesel provided this fuel meets the tentative standard DIN V 51 606.

As biodiesel attacks the elastomer materials (seals, fuel lines etc) installed for normal operation with Diesel fuel as per EN 590, operation is possible only with the so-called RME package for seals etc.

For information concerning the engines eligible for conversion and on how vehicles already delivered can be converted, contact your local service agency.

RME has a boiling range different from that of Diesel fuel. This causes the engine oil to dilute the fuel. To avoid any critical drop in viscosity, the usual engine oil change intervals (including those for the engine oil filter) must be halved.

All notes apply also to mixtures of Diesel fuel and RME.

Microorganisms in fuel systems running on Diesel fuel and biodiesel

In favourable conditions microorganisms (bacteria, fungi, yeast) contained in Diesel fuel and biodiesel (RME) are likely to multiply. For their growth, water, which is found in the form of condensation in any fuel or storage tank, as well as vital elements (eg sulphur, phosphorus, nitrogen, oxygen and trace elements) in chemically bound form are needed. Fuel additives too may be conducive to their growth.

Depending on the temperature, they multiply fast or slowly, which leads to the formation of fibrous fungal meshwork, sludge and microbial corrosion.

The consequences are: rusting of tanks, clogging-up of fuel pre-filters with rust and fibres (fibrous fungal meshwork) and, as a result of this, frequent filter changes. This leads to reductions in output and, in extreme cases, to complete engine failure.

Remedial measures in the event of an attack by microorganisms

In the event of an attack by microorganisms we recommend you combat them by using the following disinfectants:

Product: **MAR 71**

Manufacturer: Schülke & Mayr

D-22840 Norderstedt

Tel.: 040 / 521 00-0

Fax.: 0 40 / 521 00-108

or:

Product: **BAKZID**

Manufacturer: Bodechemie Hamburg

Melanchthonstr. 27

D-22525 Hamburg

Tel.: 0 40 / 540 06-0

Fax.: 0 40 / 540 06-200

Both products are soluble in Diesel fuel, biodiesel (RME) and water. They form no corrosive products after combustion. Owing to their alkalinity, acids formed as a result of microbial growth are neutralised.



Fuel

Application:

Fuel tank:

In filling operations, add 50ml (0.05 %) disinfectant to every 100l diesel fuel or biodiesel. Repeat this procedure three times and check the fuel pre-filter while doing so.

Storage tank:

If the tank sump shows no heavy water or sludge contamination, it is not necessary to flush the tank. In this case, it is sufficient to add 1 litre disinfectant per m³ tank content.

Caution:

Before using the disinfectants mentioned, observe the EU datasheets on safety (latest version) without fail.

If necessary, contact the manufacturer (eg for information on supply sources abroad).

General recommendations

The cooling system functions properly only if it works at a positive pressure. It is therefore absolutely necessary that it is kept clean and tight, that the radiator closing and working valves function correctly and the required coolant level is maintained.

Anti-freeze agents tested and approved by us guarantee sufficient protection against frost, corrosion and cavitation. They do not attack seals and hoses and do not foam.

The cooling systems of the engine must be filled for the whole year with a mixture of 60% water and 40% anti-freeze providing frost protection down to -27°C .

Coolants

Coolants which contain unsuitable anti-freeze agents or which are prepared insufficiently or incorrectly, are liable to cause failure of machinery and components in the cooling circuit due to cavitation or corrosion damage. Besides, heat insulating deposits may occur on heat transferring components, so that in the end the engine is overheated and fails.

To guarantee reliable operation of MAN Diesel engines, the coolant must generally consist of 60% water and 40% anti-freeze over the whole year. This guarantees adequate corrosion protection. In special cases, corrosion inhibitors (chemicals) according to MAN 248 may be used. As a matter of fundamental principle, emulsive anti-corrosion protection oils are not permitted.

Specified ingredients of the coolant

Water

Potable tap water with the following restricted analytical data may be used:

Appearance: colourless, transparent, free of mechanical contaminants

Hardness: max 20° German total hardness

□ 35.6° French hardness

□ 25° British hardness

□ 358 ppm USA hardness

Chlorides: max. 100 ppm

Sulphates: max. 150 ppm

pH-value at 20°C : 6.5 to 8.5

Enquires on potable water analyses are to be addressed to the competent authorities.

Where no such tap water is available, mix demineralized water or distillate or condensate until the the analytic values are reached.

Anti-freeze with corrosion inhibitor according to MAN 324 (tables on page 115)

- Use only such anti-freeze agents which have been approved according to MAN 324. A minimum concentration must always be maintained at 40% b.v. as corrosion protection is inadequate below that level.
- The cooling system is designed such that in Central Europe a coolant charge with max 40% b.v. anti-freeze (frost protection down to -27°C) can be left in the system during the summer months as well, providing the cooling system is in good working order.
- At the beginning of the cold weather months the anti-freeze content of the coolant may have to be increased for the outside temperatures to be expected (see mixing table).

Mixing table

| Outside temperature down to $^{\circ}\text{C}$ | Water % | anti-freeze % |
|--|----------------|----------------------|
| -27 | 60 | 40 |
| -31 | 55 | 45 |
| -37 | 50 | 50 |

Checking and renewal

- Coolant losses should be made up always with a mixture of water and a minimum of 40% by volume anti-freeze.
- The concentration should be checked once every three months by means of a hydrometer or refractometer.
- Never allow anti-freeze concentration to drop below 40% by volume.
- Renew complete coolant after 4 years at the latest.

Corrosion inhibitor according to MAN 248

For certain applications, where the use of anti-freeze agents is not mandatory (e.g. stationary engines, tropical climate), corrosion inhibitors according to MAN 248 must be used.

| Approved corrosion inhibitor for engine cooling systems according to Works standard MAN 248 | |
|---|---|
| Approval granted to | Product designation |
| Caltex (UK) Ltd. | Caltex XL Corrosion Inhibitor Concentrate |
| Fleetguard | Fleetguard DCA II Fluid |
| Texaco | Havoline XLI (ETX 6282) |

The following mixture ratio applies to Fleetguard DCA II Fluid:

- Maintain the concentration of 0.8 to 1.5 DCA II units per 4 litres of water equalling 240 to 450 ml fluid to 10 litres of water (2.4 to 4.5% b.v.).
- Change all the coolant after one year or after 1500 operating hours, whichever period ends earlier.
- Check the concentration of Fleetguard DCA II fluid by means of the Fleetguard Test Kit 3300-846 S after every 300 operating hours.

The following mixture ratio applies to Havoline XLI (ETX 6262):

- Maintain the concentration of 10 per cent by volume (check by means of a refractometer).
- Change all the coolant after two years or after 3000 operating hours, whichever period ends earlier.

Caution:

It is not permissible to mix MAN 324 antifreeze and MAN 248 corrosion inhibitor.

When changing from antifreeze to an corrosion inhibitor or vice versa, all the coolant is to be drained out. It is not necessary to flush the system.

Disposal of antifreeze and corrosion inhibitors

Undiluted anti-freeze and corrosion inhibitors are to be treated as special waste. Regarding the disposal of used-up coolants (mixture of anti-freezing compound with water) the regulations of the competent local authorities have to be observed.



Notes

A series of horizontal dotted lines for writing notes, spanning the width of the page.

| <p align="center">Multigrade engine oils approved to works standard MAN 271 Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271 Aceites de motor multigrados autorizados conforme a la norma de fábrica MAN 271 Huiles moteur multigrades autorisées selon norme usine MAN 271 Oli motore multigrado approvati secondo la norma interna MAN 271</p> | | |
|--|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Abu Dhabi National Oil Company | Adnoc High Performance Super Diesel Engine Oil (HPSD) | 15W-40 |
| Addinol Lube Oil GmbH | ADDINOL Premium Star MX 1048 Addinol Super star MX 1547 Addinol Super Diesel plus MD 1545 P Addinol Super star MX 1047 | 10W-40 15W-40 15W-40 10W-40 |
| Agip Petroli S.P.A. / ROM | Agip Universal Multifleet Agip Universal Extra Agip Sigma TFE Agip Superdiesel Multigrade | 15W-40 15W-40 10W-40 15W-40 |
| Agip Schmiertechnik GmbH | Autol Valve Turbo FE Autol Extra CPM HD S3 Autol Spezial CPM HD S3 | 10W-40 15W-40 15W-40 |
| Amalie Oil Company | Amalie Super XLO Amalie XLO Fleet Xcel Super Duty Plus Xcel Super Duty | 15W-40 15W-40 15W-40 15W-40 |
| Aral Lubricants GmbH | Aral Multi Turboral | 15W-40, 20W-50 |
| Ashland Oil Nederland B.V. | Ashland A.P.B. Turbo Guard DDK | 15W-40 |
| Avia Mineralöl AG | AVIA MULTI CFE PLUS Avia Multi HDC Extra Avia Multi HDC Avia Multi CFE | 10W-40 15W-40 15W-40 10W-40 |
| BayWa AG | BayWa Motorenöl Universal HD 1040 MC BayWa Motorenoel HDC 1540 BayWa Motorenöl Rennklasse Turbo 2000 BayWa Motorenöl HD Superior 1540 | 10W-40 15W-40 10W-40 15W-40 |
| BP Oil International Ltd. | Vanellus FE Vanellus C3 Multigrade Vanellus FE Extra BP Super V Turbo Visco Diesel | 10W-40 15W-40 10W-40 15W-40 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Multigrade engine oils approved to works standard MAN 271

Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271

**Aceites de motor multigrados autorizados conforme a la
norma de fábrica MAN 271**

Huiles moteur multigrades autorisées selon norme usine MAN 271

Oli motore multigrado approvati secondo la norma interna MAN 271

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|--|---|
| BP Schmierstoff GmbH | Vanellus Multigrad Leichtlaufmotorenöl 1040 | 15W-40 10W-40 |
| Bremin Mineralöl GmbH | Gold Star Testa LL HD | 10W-40 |
| Calpam Mineralöl GmbH | PAM Multifleet Longlife | 15W-40 |
| Caltex (UK) Ltd. | Caltex Delo 500 Multigrade Caltex Delo 350 Multigrade Caltex Delo 600 Multigrade | 15W-40 15W-40 15W-40 |
| Castrol Ltd. / England | Castrol CVX Castrol RX Super Plus Castrol RX Super SP Castrol RX Super E | 10W-40 15W-40 15W-40 15W-40 |
| CEPSA Lubricantes S.A. | Cepsa Supermultigrado SHPD ERTOIL MULTIRRUTA TD SHPD ERTOIL SHPD Cepsa Diesel Turbo SHPD | 15W-40 15W-40 15W-40 15W-40 |
| Conoco Inc. | HYDROCLEAR® Power-D | 15W-40 |
| Conoco Mineralöl GmbH | Jet High Level Diesel Jet Basic Level | 10W-40 15W-40 |
| DEA Mineraloel AG | DEA Cronos Super DX DEA Cronos Premium FX DEA Cronos Premium XL Lubroviscol Supreme Mehrbereich Lubroviscol Superior Leichtlauf FX | 15W-40 10W-40 10W-40 15W-40 10W-40 |
| De Oliebron B.V. | Tor Mixfleet SJ/SHPD | 15W-40 |
| Deutsche Calypsolgesellschaft | Calypsol Bison HD Calypsol Bison Turbo S3 | 15W-40 10W-40 |
| Deutsche Shell AG | Shell Engine Oil DG 1040 MAC HD Superior Shell Rimula TX | 10W-40 15W-40 15W-40 |
| Dupont-Conoco / Ungarn | Jet Action Turbo | 15W-40 |
| Eggert Mineraloel AG | EmoTron M | 15W-40 |
| EKO | EKO FORZA | 15W-40 |

| <p align="center">Multigrade engine oils approved to works standard MAN 271 Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271 Aceites de motor multigrados autorizados conforme a la norma de fábrica MAN 271 Huiles moteur multigrades autorisées selon norme usine MAN 271 Oli motore multigrado approvati secondo la norma interna MAN 271</p> | | |
|--|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Elf Lubrifiants | Antar Traxolia Z | 15W-40 |
| | Elf Disola W | 15W-40 |
| | Elf Performance Super D | 15W-40 |
| | Elf Performance 3D | 15W-40 |
| Elf Mineralölwerk Osnabrück GmbH | IROKAL plus CX | 15W-40 |
| Eller-Montan-Comp. GmbH | ELLMOTOL HD Super C3 | 15W-40 |
| EMKA Schmiertechnik GmbH | EMKA Universal HD-C | 15W-40 |
| | EMKA Supergrade LL-X | 10W-40 |
| Engen Petroleum Limited | Engen Dieselube 500 Super | 15W-40 |
| ESSO LUBRICANTS AMERICAS | Essolube XT 311 | 15W-40 |
| ESSO Lubricants Europe | Essolube XT 301 | 15W-40 |
| | OK MAX DIESEL | 15W-40 |
| | Essolube XTS 301 | 10W-40 |
| ESSO Marine Lubricants Europe | EXXMAR CM | 15W-40 |
| ESSO S.A.P.A. / Argentinien | Essolube XD-3+ Multigrade | 15W-40 |
| ESSO Singapore Ltd. | Essolube XT 331 | 15W-40 |
| EVVA Schmiermittel-Fabrik GmbH | Evvarol Multi GFP | 15W-40 |
| FL Iberia | ECOROIL SHPD | 15W-40 |
| | ECOROIL TD | 15W-40 |
| FUCHS Petrolub AG | FUCHS TITAN HYDRAMOT SL | 10W-40 |
| | Fuchs Titan Unic MC | 10W-40 |
| | Fuchs Titan LD Extra | 10W-40 |
| | Fuchs Titan Universal HD | 15W-40 |
| | Fuchs Titan Formel Plus | 15W-40 |
| GENOL GmbH & Co. | GENOL Multigrade 1540 PL | 15W-40 |
| HGK | SVG Universal C 3 | 15W-40 |
| Hilbert GmbH | XORBOL Mehrbereichsöl HDC | 15W-40 |
| Hunold Schmierstoffe GmbH | Turbostar 15W/40 | 15W-40 |
| ICPA | ICPA Extra Universal | 15W-40 |
| IGOL France | IGOL Trans Turbo 4X | 15W-40 |
| IGP-Warenverkauf | igp-Super-Motorenöl HDC | 15W-40 |
| Kamion Oil Ltd. | Bizon Lider | 15W-40 |
| Karl Käßler GmbH u. Co. KG | Selectol TOP 2000 HD | 15W-40 |
| Karl Pohlmann – Mineralölwerk | Rektol Turbo-Plus HD | 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Multigrade engine oils approved to works standard MAN 271

Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271

**Aceites de motor multigrados autorizados conforme a la
norma de fábrica MAN 271**

Huiles moteur multigrades autorisées selon norme usine MAN 271

Oli motore multigrado approvati secondo la norma interna MAN 271

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|---|--|--|
| Kompressol-Oel Verkaufs GmbH | Kompressol-Ultralub C Kompressol-FE | 15W-40 10W-40 |
| KRAFFT S.A. / Spanien | Krafft Multigrado DMOK 15W-40 | 15W-40 |
| Kuwait Petroleum B.V. | Q8 T 500 | 15W-40 |
| Liqui Moly GmbH | Nova Super HD Touring High Tech Diesel Specialoil Liqui Moly Formula 3 Protech | 15W-40 15W-40 15W-40 |
| Lümann GmbH & Co.KG | CLASSIC Motorenöl HDC | 15W-40 |
| Meguin GmbH | megol Motorenoel HD-C3 megol Motorenoel HD-C3 Super Turbo | 15W-40 15W-40 |
| Magnet Marelli S.p.A. | Urania Turbo | 15W-40 |
| Mineralöl-Raffinerie Dollbergen GmbH | Haco Multigrade Extra C Haco Multigrade Extra E Pennasol Longlife Dieselöl Pennasol Multigrade Extra C Pennasol Multigrade Extra E Terra Rec Multigrade Extra C Terra Rec Longlife Dieseloel E Terra Rec Longlife Dieseloel Terra Rec Multigrade Extra E | 15W-40 15W-40 15W-40 15W-40 15W-40 15W-40 15W-40 15W-40 15W-40 |
| Mobil Oil | Mobil Delvac MX Mobil Delvac Super 1300 Mobil Universal FL | 15W-40, 20W-50 15W-40, 20W-50 10W-40 |
| MOL Hungarian Oil and Gas Co. | Carrier Maximol-99 Diesel Carrier Turbo Diesel MOL TRANSIT 15W-40 | 15W-40 15W-40, 20W-40 15W-40 |
| Motor Oil (Hellas) | EMO Turbo Champion Plus | 15W-40 |
| MOTUL S.A. | MOTUL MARINE 4T Motul HP4D-LD Motul Tekma Supra | 15W-40 15W-40 15W-40 |

| <p align="center">Multigrade engine oils approved to works standard MAN 271 Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271 Aceites de motor multigrados autorizados conforme a la norma de fábrica MAN 271 Huiles moteur multigrades autorisées selon norme usine MAN 271 Oli motore multigrado approvati secondo la norma interna MAN 271</p> | | |
|--|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Müller, Hubert Math. Handelsges. mbH. | ARISTOKRAT Motorenöl SUPER KTX Turbo HD OTP PLUS Universal-Motorenöl TOP X Turbo 15 W 40 | 15W-40 15W-40 15W-40 |
| NIS Oil Refinery Beograd | GALAX UNIA | 15W-40 |
| Nitz Oil GmbH | IMPORTOL All Climate HD-C | 15W-40 |
| Oest, Georg Mineralölwerk | Oest Gigant Universal HD Motorenöl | 15W-40 |
| Olie Maatschaappij / NL | OMAN Multifleet Special Motoroil | 15W-40 |
| Ölwerke Julius Schindler | Econo-Veritas HDC Econo-Veritas HDE Veritas Super Turbo | 10W-40 10W-40 15W-40 |
| OMV Aktiengesellschaft | OMV con trol OMV truck M plus | 15W-40 15W-40 |
| OPET PETROLCÜLÜK A.S. | Opet Turbo Omega SHPD | 15W-40 |
| Paramo a.s. | TRYSK SUPER TURBO | 15W-40 |
| Pennzoil Products Europe GmbH | Pennzoil Long-Life 2000 Motor Oil | 15W-40, 20W-50 |
| Petrogal, s.a. | Galp Camius 15W40 | 15W-40 |
| Petrol d.d., Ljubljana | Proton Diesel | 15W-40 |
| Petrol Ofisi A.S. | P.O. Turbo Dizel S | 15W-40 |
| Petrex / Polen | Veco Super Turbo Diesel | 15W-40 |
| Petromin Lubricating Oil Co. | Petromin Super Fleet LD | 15W-40 |
| Petronas DAGANGAN / Malaysia | Petronas Motolub CS 3 | 15W-40 |
| Präg GmbH & Co. KG | Prägol Motorenöl Supreme Prägol Superior | 15W-40 10W-40 |
| Prista Oil | Prista® Leader | 15W-40 |
| Protech | Meister-Öl Hochleistungsmotorenöl | 15W-40 |
| Raiffeisen Central-Genossenschaft Nordwest eG | Raiffeisen Super Universal Plus | 15W-40 |
| Rafineria Gdanska S.A. | Lotos Diesel CE/SF Lotos Diesel 1 CE/SF Turdus 2 SHPD Turdus 1 LOTOS DIESEL CG-4/SH | 15W-40 15W-40 15W-40 15W-40 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Multigrade engine oils approved to works standard MAN 271

Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271

**Aceites de motor multigrados autorizados conforme a la
norma de fábrica MAN 271**

Huiles moteur multigrades autorisées selon norme usine MAN 271

Oli motore multigrado approvati secondo la norma interna MAN 271

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|---|--|--|
| Rafineria Trzebinia S.A. | Aquila Diesel Turbo Aquila Diesel Turbo Max | 15W-40 15W-40 |
| Ravensberger Schmierstoffvertriebs GmbH | RAVENOL Turbo C | 15W-40 |
| Repsol Distribucion S.A. | Repsol MULTI-G DIESEL | 15W-40 |
| SAEL | Gulfleet Multi Trailer (EP) Gulf Multi Duty (EP) | 15W-40 15W-40 |
| Shell International London | Shell Sirius Multigrade Shell Rimula Super Shell Rimula TX Shell Rimula X Shell Myrina X CG-4 Shell Universal Engine Oil | 15W-40 15W-40 15W-40 15W-40, 20W-50 15W-40 15W-40 |
| SIPS Dieter Döcker GmbH | SIPS-MULTI-PLUS HD | 15W-40 |
| SRS GmbH | Wintershall TFE Wintershall Multi Rekord Plus Wintershall Primalub Wintershall Rekord 15/40 Wintershall Multi Rekord Wintershall Magnum Turbo | 10W-40 15W-40 15W-40 15W-40 15W-40 15W-40 |
| Statoil Marketing Lubricants R&D | Statoil Power Way | 15W-40 |
| Südöl Mineralöl Raffinerie GmbH | Südöl Recycling Super Motorenöl Turbo | 15W-40 |
| TAMOIL Lubes GmbH | Tamoil Formula SP Plus | 15W-40 |
| TEDEX Oil Sp.z.o.o. | TEDEX Diesel Truck Motor Oil TEDEX Multifleet FE Motor Oil | 15W-40, 20W-50 15W-40 |
| TEDEX Vertriebs GmbH | TEDEX Diesel Truck Motor Oil TEDEX Multifleet FE Motor Oil | 15W-40, 20W-50 15W-40 |
| Texaco Technology Ghent | Ursa Super LA Multigrade | 15W-40 |

| <p align="center">Multigrade engine oils approved to works standard MAN 271 Mehrbereichsmotorenöle zugelassen nach Werknorm MAN 271 Aceites de motor multigrados autorizados conforme a la norma de fábrica MAN 271 Huiles moteur multigrades autorisées selon norme usine MAN 271 Oli motore multigrado approvati secondo la norma interna MAN 271</p> | | |
|--|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| TOTALFINA | Fina Kappa Supra Fina Kappa Supra Plus Fina Kappa Turbo DI Total Rubia 4400 Total Rubia 4400 TSA TOTAL Rubia XT | 15W-40 15W-40 10W-40, 15W-40 15W-40 15W-40 15W-40 |
| Unil International | UNIL OPAL Intercooler 400 UNIL OPAL Intercooler 450 UNIL OPAL MEDOS 600 | 15W-40 15W-40 15W-40 |
| V.W. Günther | Masterclass Gamma 1540 | 15W-40 |
| Valvoline International Europe | Valvoline All Fleet Plus Valvoline Premium Blue E | 15W-40 15W-40 |
| Veba Oel AG | Veba Logenta Universal Motoröl Veba Virada Longlife Motoröl | 15W-40 15W-40 |
| Veedol International Ltd. | Veedol Dieselstar | 15W-40 |
| Voitländer GmbH | Argon-Leichtlauföl 10W40 SHPD Argon-Hochleistungs-Mehrbereichsöl | 10W-40 15W-40 |
| Wecotect GmbH | Weco HDC-IL Multigrade | 15W-40 |
| Westfalen AG | Westfalen Corda Motoröl | 15W-40 |
| Wunsch Öle GmbH | Wunsch Record Multi HD-E2 | 15W-40 |
| Würth, Adolf GmbH & Co. KG | Würth Triathlon Diesel | 15W-40 |
| YACCO S.A. | YACCO TRANSPRO 30 Yacco Transpro 25 | 15W-40 15W-40 |
| Zeller & Gmelin GmbH & Co. | Divinol turbo Divinol Multimax C 3 | 15W-40 15W-40 |



A series of horizontal dotted lines for writing notes, spanning the width of the page.

| <p align="center">High-performance diesel engine oils approved to works standard M 3275 Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275 Aceites de motor diesel de alto rendimiento autorizados conforme a la norma de fábrica M 3275 Huiles moteur diesel hautes performances autorisées selon norme usine M 3275 Oli ad alte prestazioni per motori diesel approvati secondo la norma interna MAN 3275</p> | | |
|---|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Abu Dhabi National Oil Company | Adnoc Super High Performance Diesel Engine Oil SHPD 15W/40 Adnoc Extra Super Plus Engine Oil | 15W-40 15W-40 |
| Addinol Lube Oil GmbH | Addinol Diesel Longlife MD 1546 Addinol Super Longlife MD 1046 | 15W-40 10W-40 |
| Agip Petroli S.P.A. / ROM | Agip Sigma Super TFE Agip Sigma Turbo Agip Blitum T | 10W-40 15W-40 15W-40 |
| Agip Schmiertechnik GmbH | Autol Valve Turbo FE Plus Autol Valve SHP | 10W-40 15W-40 |
| ALUCHEM SRL | ALUSYNT® 10W/40 | 10W-40 |
| Amalie Petroquímica S.A. | Amalie Superturbo Diesel SHPD 15W-40/ASPA | 15W-40 |
| Aral Lubricants GmbH | Aral HighTurboral Aral PlusTurboral Aral ExtraTurboral | 10W-40 15W-40 10W-40 |
| Ashland Oil Nederland B.V. | A.P.B. Super Turbo SHPD DDE | 15W-40 |
| Auto-Teile-Ring GmbH | CARTECHNIC SHPD Motorenöl | 15W-40 |
| Avia Mineralöl AG | Avia Multi HDC Plus Avia Turbosynth CFE | 15W-40 10W-40 |
| BayWa AG | BayWa Super Truck 1540 BayWa Motorenöl Turbo 4000 | 15W-40 10W-40 |
| Bechem, Carl GmbH | HESSOL Turbo Diesel HDC Bechem Staroil Super HPD PLUS | 15W-40 15W-40 |
| Blaser Swissslube AG | Blasol MHTO | 10W-40 |
| BP Oil International Ltd. | Vanellus HT Vanellus C3 Extra | 10W-40 15W-40 |
| Bremin Mineralöl GmbH | Gold Star Testa HD | 15W-40 |
| Bucher AG | Motorex MC Plus Motorex Turbo SK | 10W-40 10W-40 |
| Calpam Mineralöl GmbH | Calpam Turbo Fleet Calpam Truck-FE | 15W-40 10W-40 |
| Caltex (UK) Ltd. | Caltex Delo SHP Multigrade | 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

High-performance diesel engine oils approved to works standard M 3275

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3275**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3275

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3275**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| Castrol Ltd. / England | Castrol Dynamax | 10W-40 |
| | Castrol Dynamax HD | 10W-40 |
| | Motorenöl XP 54 A | 15W-40 |
| | Castrol Turbomax Light | 10W-40 |
| | Castrol Turbomax | 15W-40 |
| Chevron Lubricants | DELO SHP Multigrade | 15W-40, 20W-50 |
| CEPSA Lubricantes S.A. | CEPSA ALTO RENDIMIENTO MAN M 3275 | 15W-40 |
| | ERTOIL SUPER HPD LD | 15W-40 |
| Compania Española de Petroleos | Cepsa Ultra SHPD | 15W-40 |
| De Oliebron B.V. | Tor Synfleet SHPD | 10W-40 |
| DEA Mineraloel AG | DEA Cronos Super TDL | 15W-40 |
| | Lubroviscol Turbo Extra D | 15W-40 |
| | DEA Cronos Premium HC | 10W-40 |
| Delek Ltd. | Delkol Turbomotor | 15W-40 |
| Deutsche Calypsolgesellschaft | Calypsol Bison FE Plus | 10W-40 |
| | Calypsol Bison Truck | 15W-40 |
| Deutsche Shell AG | MAC HD Superior Motorenöl Plus | 15W-40 |
| | Shell Myrina X | 15W-40 |
| Deutsche Tamoil GmbH | HEM Super Diesel Turbo SHPD | 15W-40 |
| EKO | EKO PETRON | 15W-40 |
| Elf Lubrificants | Elf Performance Trophy DX | 15W-40 |
| | Antar Grapholia TX | 15W-40 |
| | Elf Ecomax FE Plus | 10W-40 |
| | Elf Ecomax FE | 10W-40 |
| Eller-Montan-Comp. GmbH | Ellmotol Turbo HD | 15W-40 |
| EMKA Schmiertechnik GmbH | EMKA Turbo Super SHPD | 15W-40 |
| Engen Petroleum Limited | Engen Dieselube 600 Super | 15W-40 |
| ESSO / Argentinien | Essolube XD-3 Extra+ | 15W-40 |
| ESSO LUBRICANTS AMERICAS | ESSOLUBE XT 411 | 15W-40 |

| High-performance diesel engine oils approved to works standard M 3275 Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275 Aceites de motor diesel de alto rendimiento autorizados conforme a la norma de fábrica M 3275 Huiles moteur diesel hautes performances autorisées selon norme usine M 3275 Oli ad alte prestazioni per motori diesel approvati secondo la norma interna MAN 3275 | | |
|---|---|---|
| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
| ESSO Lubricants Europe | ESSOLUBE XT 501 OK TALUS DIESEL Essolube TDX Essolube XT 401 | 15W-40 15W-40 10W-40 15W-40 |
| ESSO Marine Lubricants EUROPE | EXXMAR CM SUPER | 15W-40 |
| ESSO Singapore Ltd. | Essolube XD-3 Extra+ Essolube XT 431 Essolube Pickup Turbospeed | 15W-40 15W-40 15W-40 |
| EVVA Schmiermittel-Fabrik GmbH | Evvarol Multi SHPDO EVVA GALAX FE | 15W-40 10W-40 |
| FL Iberia | ECOROIL SHPD SUPER | 15W-40 |
| Fuchs Petrolub AG | Fuchs Titan Truck Fuchs Titan Unic Plus MC | 15W-40 10W-40 |
| GENOL GmbH & Co. | Genol Long-Truck 1540 | 15W-40 |
| HGK | SVG Uniplus Turbo SHPD SVG ESVAUGOL FE | 15W-40 10W-40 |
| Hilbert GmbH | Xorbol Super Mehrbereichsöl HDC | 15W-40 |
| Hunold Schmierstoffe GmbH | Hunold HD 4 CX Plus Hunold Multitec 10W/40 | 15W-40 10W-40 |
| IGOL France | IGOL Trans Turbo 5X | 15W-40 |
| INA Maziva Rijeka | INA SUPER TURBO | 15W-40 |
| Karl Käßpler GmbH u. Co. KG | Selectol Turbo SHPD Mehrbereich-Motorenöl | 15W-40 |
| Kompressol-Oel Verkaufs GmbH | Kompressol-Ultralub C Plus | 15W-40 |
| KORAMO a.s. | Mogul Diesel DTT 15W-40 | 15W-40 |
| KRAFFT S.A. / Spanien | MOLYCOTE SHPD Multigrado SHPD DMOK | 15W-40 15W-40 |
| Kuttenkeuler GmbH | Mega Truck | 15W-40 |
| Kuwait Petroleum B.V. | Q8 T 710 Q8 T 720 Q8 T 800 KUWAITOIL Ultra Diesel API CG-4 | 15W-40 15W-40 10W-40 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

High-performance diesel engine oils approved to works standard M 3275

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3275**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3275

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3275**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| Liqui Moly GmbH | Liqui Moly Profi Leichtlauf 10W-40 Motorenöl | 10W-40 |
| | Touring High Tech SHPD | 15W-40 |
| Lümann GmbH & Co. KG | CLASSIC Motorenöl TD | 15W-40 |
| | CLASSIC Motorenöl Plus | 10W-40 |
| Magneti Marelli S.p.A. | Urania Turbo LD | 15W-40 |
| Meguin GmbH | megol Motorenoel SHPD | 15W-40 |
| | megol Motorenoel Super Leichtlauf FAMO | 10W-40 |
| Millers Oils Ltd. / England | Magnafleet SHPD | 15W-40 |
| | Truckmaster Global XD | 15W-40 |
| | Truckmaster XHPD | 15W-40 |
| Mineralöl-Raffinerie Dollbergen GmbH | TERRA REC Turbo Super | 15W-40 |
| | Pennasol Turbo Super E | 15W-40 |
| | Pennasol Turbo Super | 15W-40 |
| Mobil Oil | Mobil Delvac 1400 Super | 15W-40 |
| | Mobil Delvac Excel | 15W-40 |
| | Mobil Delvac HP | 15W-40 |
| | Mobil Delvac XHP | 10W-40, 15W-40 |
| | Mobil Turbofleet | 15W-40 |
| Motor Oil (Hellas) | EMO SHPD Plus | 15W-40, 20W-50 |
| MOTUL S.A. | Motul Tekma Mega | 15W-40 |
| | Motul Tekma Mega X | 15W-40 |
| Müller, Hubert Math. Handelsges. mbH | OTP PLUS Universal Leichtlauföl | 10W-40 |
| Neste Oy Lubrication | Neste Turbo LE 15W/40 | 15W-40 |
| New-Process AG / Schmierstoffe | New-Process SHPD Super SK | 15W-40 |
| | New Process Super Dallas | 10W-40 |
| NIS Oil Refinery Beograd | Galax Super Long | 15W-40 |
| Oest, Georg Mineralölwerk | Oest Dimo Super S3 | 15W-40 |
| Olie Maatschappij / NL | OMAN Super CD Multigrade Motoroil | 15W-40 |
| Ölwerke Julius Schindler | Veritas Super HDC-N | 15W-40 |
| | Econo-Veritas HDE Plus | 10W-40 |

| <p align="center">High-performance diesel engine oils approved to works standard M 3275 Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275 Aceites de motor diesel de alto rendimiento autorizados conforme a la norma de fábrica M 3275 Huiles moteur diesel hautes performances autorisées selon norme usine M 3275 Oli ad alte prestazioni per motori diesel approvati secondo la norma interna MAN 3275</p> | | |
|---|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| OMV Aktiengesellschaft | OMV Truck LD OMV eco truck extra | 15W-40 10W-40 |
| Oswald Kluth | Kluth-Mehrbereichsmotorenöl Super HDC | 15W-40 |
| OY TEBOIL AB / Finland | Teboil Super HPD | 15W-40 |
| Panolin AG | Panolin Universal FE Panolin Universal SFE | 10W-40 10W-40 |
| Paramo a.s. | TRYSK TOP TIR | 15W-40 |
| Pennzoil Products Europe GmbH | Pennzoil FLEETMASTER® SHPD Motor Oil Pennzoil PENNFORCE® Motor Oil | 15W-40 10W-40 |
| Petrol d.d., Ljubljana | Proton Turbo Diesel | 15W-40 |
| Petrol Ofisi A.S. | P.O. Turbo Dizel Ekstra SAE 15W/40 E | 15W-40 |
| Petrolex / Polen | Veco Challenger SHPD | 15W-40 |
| Präg GmbH & Co. KG | Prägol Supreme Prägol Motorenöl | 10W-40 15W-40 |
| Raffineries Imperator / Frankreich | Imperator RAFF Super HPDO | 15W-40 |
| Rafineria Gdanska S.A. | TURDUS 1 SHPD | 15W-40 |
| Raiffeisen Central-Genossenschaft Nordwest eG | Raiffeisen Turbo Leichtlauf | 10W-40 |
| Repsol Distribución S.A. | Repsol Super Turbo Diesel | 15W-40 |
| SAEL | Gulfleet Long Road (EP) | 15W-40 |
| Shell International London | Shell Rimula Super Shell Rimula Plus Shell Normina Plus Shell Myrina X | 15W-40 15W-40 15W-40 15W-40 |
| SIPS Dieter Döcker GmbH | Sips-Record Turbo T | 15W-40 |
| Slovnaft Vúrup | Madit Tirman Madit Tirman II | 15W-40 15W-40 |
| Sonol Israel Ltd. | Sadol S-600 | 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

High-performance diesel engine oils approved to works standard M 3275

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3275**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3275

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3275**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| SRS GmbH | Wintershall TFF | 10W-40 |
| | Wintershall Turbo-Rekord | 15W-40 |
| | Wintershall TFX | 10W-40 |
| | Wintershall Magnum Turbo D 3 | 15W-40 |
| Statoil Marketing Lubricants R&D | Statoil Max Way | 15W-40 |
| Südöl Mineralöl Raffinerie GmbH | Südöl SHPD | 15W-40 |
| Sun Oil Company N.V. | Super HPD | 15W-40 |
| TEDEX Oil Sp.z.o.o. | Tedex Diesel Truck FE Motor Oil | 15W-40 |
| | Tedex Diesel Trucks Special Motor Oil | 15W-40 |
| TEDEX Vertriebs GmbH | Tedex Diesel Trucks Special Motor Oil | 15W-40 |
| Texaco Technology Ghent | Ursa Super TD | 15W-40 |
| TOTALFINA | Fina Kappa Extra | 15W-40 |
| | Total Rubia TIR 6400 | 15W-40 |
| | Total Rubia TIR MAX | 15W-40 |
| | Fina Kappa FE | 10W-40 |
| | Total Rubia TIR XLD | 15W-40 |
| Turbotank Mineralölhandel Börsche & Bödeker GmbH | Turbo HD Motorenöl SHPD Plus | 15W-40 |
| Unil Deutschland GmbH | UNIL MANTO TD | 15W-40 |
| Unil Lubrifiants | UNIL OPAL MEDOS 650 | 15W-40 |
| V.W. Günther | master class Taurus 1540 | 15W-40 |
| Valvoline (Deutschland) GmbH | Valvoline All Fleet Extra FE | 10W-40 |
| Valvoline International Europe | All Fleet Extra | 15W-40 |
| Veba Oel AG | Veba Logenta Super Truck Dieselmotorenöl | 15W-40 |
| Veedol International Ltd. | Veedol Turbostar | 15W-40 |
| | Veedol Dynastar | 10W-40 |
| Voitländer GmbH | Argon-Hochleistungs- Dieselmotorenöl SHPD | 15W-40 |
| Wecotect GmbH | WECO Super Motorenöl HDC-LD | 15W-40 |
| Westfalen AG | Westfalen Turbo Plus Motoröl | 15W-40 |
| | Westfalen Universa XT | 10W-40 |



| <p align="center">High-performance diesel engine oils approved to works standard M 3275 Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3275 Aceites de motor diesel de alto rendimiento autorizados conforme a la norma de fábrica M 3275 Huiles moteur diesel hautes performances autorisées selon norme usine M 3275 Oli ad alte prestazioni per motori diesel approvati secondo la norma interna MAN 3275</p> | | |
|---|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Wisura GmbH & Co. | WISURA Premium MC 10W/40 | 10W-40 |
| | WISURA Multi TS | 15W-40 |
| Wolf Motor Oils | Wolf Masterlube Longdrain Turbo | 15W-40 |
| Wunsch Öle GmbH | Wunsch Turbo Rekord | 15W-40 |
| | Wunsch TLM | 10W-40 |
| Würth, Adolf GmbH & Co. KG | Triathlon Dynamik | 10W-40, 15W-40 |
| | Triathlon Longlife | 15W-40 |
| YPF S.A. – Lubricants Division | Diesel Movil Extra Vida | 15W-40 |
| | Diesel YPF Extra Vida | 15W-40 |
| Zeller & Gmelin GmbH & Co. | Divinol Multimax Top | 15W-40 |



A series of horizontal dotted lines spanning the width of the page, intended for writing notes.

High-performance diesel engine oils approved to works standard M 3277

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3277

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3277**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3277

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3277**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| Addinol Lube Oil GmbH | ADDINOL Super Truck MD 1048 | 10W-40 |
| Agip Petroli S.P.A. / ROM | Agip Sigma Trucksint TFE | 5W-30 |
| | Agip Sigma Ultra TFE | 10W-40 |
| Agip Schmiertechnik GmbH | Autol Valve Ultra FE | 10W-40 |
| ARAL Lubricants GmbH | Aral SuperTurboral | 5W-30 |
| | Aral MegaTurboral | 10W-40 |
| Avia Mineralöl AG | AVIA Turbosynth HT-E | 10W-40 |
| BayWa AG | BayWa Super Truck 1040 MC | 10W-40 |
| BP Oil International Ltd. | BP Vanellus HT Extra | 10W-40 |
| | BP Vanellus E4 Plus | 10W-40 |
| | BP Vanellus HT Ultra | 5W-30 |
| | BP MAN Extra | 10W-40 |
| Bucher AG | MC Power 3 | 10W-40 |
| Castrol Ltd. / England | Castrol Syntruck | 5W-40 |
| | Castrol Dynamax | 10W-40 |
| | Castrol Synmax | 5W-40 |
| CEPSA Lubricantes S.A. | Cepsa MAN Supertruck 3277 | 10W-40 |
| | Cepsa Eurotrans SHPD | 10W-40 |
| De Oliebron B.V. | Tor Turbosynth | 10W-40 |
| DEA Mineraloel AG | DEA Cronus Synth | 5W-40 |
| | DEA Cronus Premium LD | 10W-40 |
| Deutsche Calypsolgesellschaft | Calypsol Bison Cargo | 10W-40 |
| Deutsche Tamoil GmbH | HEM Extra Spezial HD SAE 10W-40 UHPD | 10W-40 |
| Elf Lubrificants | Elf Performance Experty | 10W-40 |
| | Antar Maxolia | 10W-40 |
| | Elf Performance Experty FE | 5W-30 |
| EMKA Schmiertechnik GmbH | EMKA Cargo MC | 10W-40 |
| ESSO Lubricants Europe | Essolube XTS 501 | 10W-40 |
| ESSO Marine Lubricants EUROPE | Exxmar SCM | 10W-40 |
| EUROL Mineralöl Handelsges.m.b.H. | Eurol Concept LD 10W/40 | 10W-40 |
| FUCHS Petrolub AG | Fuchs Titan Cargo MC | 10W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

High-performance diesel engine oils approved to works standard M 3277

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3277

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3277**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3277

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3277**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| Ginouves Georges S.A. | YORK 847 | 10W-40 |
| HAFA Lubrifiants | HAFA EURODEX | 10W-40 |
| HGK | SVG ESVAUGOL SHPD-O | 10W-40 |
| Hunold Schmierstoffe GmbH | Multicargo 10W/40 | 10W-40 |
| IGOL France | IGOL Trans Turbo 6X | 10W-40 |
| INA Industrija Zagreb / Kroatien | INA SUPER EKO | 10W-40 |
| INA Maziva Rijeka | INA Super 2000 | 10W-40 |
| Japan Energy Corporation | JOMO Delcion | 5W-40 |
| Kompressol-Oel Verkaufs GmbH | Kompressol-FX | 10W-40 |
| KORAMO a.s. | Mogul Diesel DTT Plus | 10W-40 |
| KROON OIL B.V. | ARMADO SYNTH | 10W-40 |
| Kuttenkeuler GmbH | Master Truck | 10W-40 |
| Kuwait Petroleum B.V. | Q8 T 850 | 10W-40 |
| Liqui Moly GmbH | LKW-Langzeit-Motorenöl | 10W-40 |
| Lümann GmbH & Co.KG | CLASSIC Motorenöl Super | 10W-40 |
| Magneti Marelli S.p.A. | Urania 100K | 10W-40 |
| Meguin GmbH | megol Motorenoel Super Leichtlauf DIMO | 10W-40 |
| Mineralöl-Raffinerie Dollbergen GmbH | PENNASOL Performance Truck | 10W-40 |
| Mobil Oil | Mobil Delvac XHP Extra Mobil Delvac 1 SHC Mobil Delvac XHP Ultra Mobil MAN Extra | 10W-40 5W-40 5W-30 10W-40 |
| MOL Hungarian Oil and Gas Co. | Mol Synt Diesel | 10W-40 |
| MOTUL S.A. | Motul Tekma Ultima | 10W-40 |
| Müller, Hubert Math. Handelsgesellschaft mbH | OTP PLUS Super-Leichtlauf-Motorenöl | 10W-40 |
| New-Process AG / Schmierstoffe | New-Process Dallas Plus 3 | 10W-40 |
| Noviol B.V. | Kennoco Eurosynth HP | 10W-40 |
| Ölwerke Julius Schindler | Veritas Spezial HD Extra | 10W-40 |
| OMV Aktiengesellschaft | OMV truck FE plus | 10W-40 |
| Oswalt Kluth | KLUTH-Mehrbereichs Superleichtlaufmotorenöl UHPD | 10W-40 |

| <p align="center">High-performance diesel engine oils approved to works standard M 3277 Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3277 Aceites de motor diesel de alto rendimiento autorizados conforme a la norma de fábrica M 3277 Huiles moteur diesel hautes performances autorisées selon norme usine M 3277 Oli ad alte prestazioni per motori diesel approvati secondo la norma interna MAN 3277</p> | | |
|---|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Panolin AG | Panolin Diesel HTE | 10W-40 |
| Pennzoil Products Europe GmbH | Pennzoil SUPREME DUTY® SYN 2000 Full Synthetic Diesel Oil | 5W-40 |
| Petro-Oil Sp.z.o.o. | Petro-Oil Diesel XHPDO CF | 10W-40 |
| Petrol d.d. Ljubljana | PROTON Turbo Diesel Super | 10W-40 |
| Raiffeisen Central-Genossenschaft Nordwest eG | Raiffeisen Power Truck | 10W-40 |
| SAEL | Gulfleet Highway (EP) Gulfleet Supreme | 10W-40 5W-30 |
| Shell International London | Shell Normina Extra Shell Rimula Ultra | 10W-40 5W-30, 10W-40 |
| SIPS Dieter Döcker GmbH | TSL 4 Motorenoel | 10W-40 |
| Slovnaft Vúrup | MADIT MISTRAL | 10W-40 |
| SRS GmbH | Wintershall TFG | 10W-40 |
| Statoil | Statoil TruckWay | 10W-40 |
| Sun Oil Company N.V. | SUNOCO Ultra HPD | 10W-40 |
| Tamoil Lubes Marketing S.A. | Tamoil Diesel Premium FE | 10W-40 |
| TEDEX Oil Sp.z.o.o. | Tedex Diesel Truck UHPD MOTOR OIL | 10W-40 |
| TEDEX Vertriebs GmbH | Tedex Diesel Truck UHPD MOTOR OIL | 10W-40 |
| Texaco Technology Ghent | URSA Super TDX | 10W-40 |
| TOTALFINA | TOTAL Rubia TIR 8600 TOTAL RUBIA TIR 9200 Fina Kappa Ultra Fina Kappa First | 10W-40 5W-30 10W-40 5W-30 |
| Turbotank Mineralölhandel Bösche & Bödecker GmbH | Turbo-Leichtlauföl KM | 10W-40 |
| Unil Lubrifants | Unil Opal LCM 800 | 10W-40 |
| Valvoline International Europe | Valvoline ProFleet | 10W-40 |
| Veba Oel AG | Veba Virada ECO-Truck Dieselmotoröl | 10W-40 |
| Veedol International Ltd. | Veedol Dynastar Veedol Dynastar FS | 10W-40 5W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

High-performance diesel engine oils approved to works standard M 3277

Hochleistungsdieselmotorenöle zugelassen nach Werknorm M 3277

**Aceites de motor diesel de alto rendimiento autorizados
conforme a la norma de fábrica M 3277**

Huiles moteur diesel hautes performances autorisées selon norme usine M 3277

**Oli ad alte prestazioni per motori diesel approvati
secondo la norma interna MAN 3277**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|--|---|---|
| Westfalen AG | Epicent Motoröl | 10W-40 |
| Wolf Motor Oils | Wolf Masterlube Long Drain Ultra | 10W-40 |
| Wunsch Öle GmbH | Wunsch TSL – Diesel | 10W-40 |
| Würth, Adolf GmbH & Co. KG | Würth Triathlon Cargo | 10W-40 |
| | Triathlon Super Cargo | 10W-40 |
| YACCO S.A. | Yacco Transpro 45 | 10W-40 |
| Zeller & Gmelin | Divinol Multimax Synth 10W/40 | 10W-40 |



A series of horizontal dotted lines for writing notes.



A series of horizontal dotted lines spanning the width of the page, intended for writing notes.

| <p align="center">Single-grade engine oils approved to works standard MAN 270 Einbereichsmotorenöle zugelassen nach Werknorm MAN 270 Aceites de motor monogrados autorizados conforme a la norma de fábrica MAN 270 Huiles moteur monogrades autorisées selon norme usine MAN 270 Oli motore monogrado approvati secondo la norma interna MAN 270</p> | | |
|--|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| Abu Dhabi National Oil Company | Adnoc Engine Oil XD3+ | 30, 40, 50 |
| Addinol Lube Oil GmbH | Addinol Turbo Diesel MD 205 Addinol Turbo Diesel MD 305 Addinol Turbo Diesel MD 405 Addinol Turbo Diesel MD 505 | 20W-20 30 40 50 |
| Aral Lubricants GmbH | Aral BasicTurboral | 20W-20, 30 |
| Avia Mineralöl AG | AVIA Special HDC | 20W-20, 30 |
| Caltex (UK) Ltd. | Caltex Delo 500 Caltex Delo 600 Caltex Delo 350 | 30, 40 30, 40 30, 40 |
| Castrol Ltd. / England | Castrol CRD-DB | 20W-20, 30 |
| CEPSA Lubricantes S.A. | Cepsa RETTO Super Serie 3 | 30, 40 |
| DEA Mineraloel AG | DEA Cronus Super Lubroviscol Supreme HD-D | 20W-20, 30 20W-20, 30 |
| Deutsche Shell AG | MAC HD Superior Shell Rimula X Monograde | 20W-20, 30 20W-20, 30 |
| EKO | EKO MARSA | 30, 40 |
| ELF Lubrifiants | ELF Disola MT ELF Performance Super D ELF Performance 3D Antar Grapholia MS Antar Traxolia Z | 30 30 30, 40 30 30 |
| Engen Petroleum Limited | Engen Dieselube 500 Series Engen Dieselube 630 | 30, 40 30 |
| ESSO LUBRICANTS AMERICAS | ESSOLUBE X 311 | 30, 40 |
| ESSO Lubricants Europe | Essolube X 301 Essolube XD-3+ | 30, 40 30 |
| ESSO MARINE LUBRICANTS EUROPE | EXXMAR CM | 30 |
| ESSO S.A.P.A. / Argentinien | Essolube XD-3+ | 40 |
| FUCHS Petrolub AG | Fuchs Titan Universal HD | 20W-20, 20W-30, 30, 40 |
| KRAFFT S.A. / Spanien | Krafft Monogrado DMOK 3040 | 30 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Single-grade engine oils approved to works standard MAN 270

Einbereichsmotorenöle zugelassen nach Werknorm MAN 270

**Aceites de motor monogrados autorizados
conforme a la norma de fábrica MAN 270**

Huiles moteur monogrades autorisées selon norme usine MAN 270

Oli motore monogrado approvati secondo la norma interna MAN 270

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
|---|--|--|
| Mineralöl-Raffinerie Dollbergen GmbH | Haco HD-Motorenöl Extra C Terra Rec Motoroil Extra C Pennasol Motoroil Extra C | 20W-20, 30 20W-20, 30 20W-20, 30 |
| Mobil Oil | Mobil Motrex 1300 | 30 |
| MOL Hungarian Oil and Gas Co. | Carrier Turbo S | 20W-20, 30, 40, 50 |
| Motor Oil (Hellas) | EMO Turbo Champion Plus | 30, 40 |
| OMV Aktiengesellschaft | OMV Truck | 20W-20, 30, 40 |
| Petrol Ofisi A.S. | P.O. Turbosarj | 30 |
| Petromin Lubricating Oil Co. | Petromin Super Fleet LDM 40 | 40 |
| Rafineria Gdanska S.A. | IBIS HPDO | 40 |
| SAEL | Gulfleet Super Trailer | 30, 40 |
| Shell International London | Shell Sirius Shell Rimula X 30 Shell Rimula X 40 Shell Myrina X Monograde | 30, 40 30 40 30, 40 |
| SRS GmbH | Wintershall Rekord | 20W-20, 20W-30, 30, 40, 50 |
| Statoil Marketing Lubricants R&D | Statoil Diesel Way | 20W-30, 30, 40 |
| Texaco Technology Ghent | Ursa Super LA | 20W-20, 30 |
| TOTALFINA | Fina Kappa Super TOTAL Rubia K | 20W-20, 30, 40 20W-20, 30, 40 |
| Valvoline International Europe | Valvoline All Fleet Plus | 20W-20, 30 |
| Veba Oel AG | Veba Movara Extra-Motoroel | 20W-20, 30 |
| Veedol International Ltd. | Veedol Diesel HDC | 20W-20, 30 |
| Westfalen AG | Westfalen C 3 20 Motoröl Westfalen C 3 30 Motoröl | 20W-20 30 |



A series of horizontal dotted lines for writing notes, spanning the width of the page.



A series of horizontal dotted lines spanning the width of the page, intended for writing notes.

Engine oils for high-performance marine diesel engines available on the US market.

Motorenöle für Hochleistungs-Schiffsdieselmotoren, verfügbar auf dem US-Markt.

Aceites para motores diesel marinos de alto rendimiento disponibles en el mercado de los E.E.U.U..

Huiles moteur pour moteurs Diesel marins de grande puissance, disponibles sur le marché américain

Oli per motori diesel marini potentissimi disponibili sul mercato statunitense

| <p align="center">Engine oils with MAN 270 / 271 quality Motorenöle mit MAN 270 / 271 - Niveau Aceites de motor con nivel MAN 270 / 271 Huiles moteur de niveau MAN 270 / 271 Oli motore con qualità MAN 270 / 271</p> | | |
|---|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto</p> | <p align="center">Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE</p> |
| BP | Vanellus C3 Extra | 30 |
| Kendall | Super D 3 | 30, 40 |
| Mobil | Delvac 1 SHC | 5W-40 |
| Pennzoil | Supreme Duty Fleet Motor Oil | 30, 40 |
| Unocal | Extra Duty Guardol Motor Oil 1300 Series | 30, 40 |
| Quaker State Corp. | HDX Plus Universal Fleet | 40 |
| Tennessee Farmers Agrotection | | 30 |
| Valvoline | All Fleet Extra | 30 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Engine oils for high-performance marine diesel engines available on the US market.

Motorenöle für Hochleistungs-Schiffsdieselmotoren, verfügbar auf dem US-Markt.

Aceites para motores diesel marinos de alto rendimiento disponibles en el mercado de los E.E.U.U..

Huiles moteur pour moteurs Diesel marins de grande puissance, disponibles sur le marché américain

Oli per motori diesel marini potentissimi disponibili sul mercato statunitense

| Engine oils with SHPD quality Motorenöle mit SHPD - Niveau Aceites de motor con nivel SHPD Huiles moteur de niveau SHPD Oli motore con qualità SHPD | | |
|--|---|---|
| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
| Cato Oil | Mystik JT-8 Extra | 30, 40 |
| Chevron | Delo 300 Motor Oil | 30, 40 |
| Drydene | Series IV Motor Oil | 30, 40 |
| Mobil | Delvac 1330 und 1340 | 30, 40 |
| Quaker State Corp. | Quaker Super Diesel | 30, 40 |
| Unocal | Extra Duty Guardol Motor Oil 1500 Series | 30, 40 |
| Valvoline | All Fleet Super | 30 |

Engine oils for marine diesel engines, available on the US market.

Multigrade engine oils from the US market for engines subject to lower stress.

Motorenöle für Schiffsdieselmotoren, verfügbar auf dem US-Markt.

Mehrbereichsmotorenöle des US-Marktes für weniger belastete Motoren.

Aceites de motor para motores diesel marinos, disponibles en el mercado de los E.E.U.U..

Aceites de motor multigrados del mercado de los E.E.U.U. para motores menos cargados.

Huiles moteur pour moteurs Diesel marins, disponibles sur le marché américain.

Huiles moteur multigrades du marché américain pour moteurs soumis à des sollicitations moins importantes.

Oli per motori marini diesel, disponibili negli USA.

Oli motore multigrado del mercato americano per motori poco sollecitati.

| Engine oils with MAN 271 quality Motorenöle mit MAN 271 - Niveau Aceites de motor con nivel MAN 271 Huiles moteur de niveau MAN 271 Oli motore con qualità MAN 271 | | |
|---|---|---|
| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
| Amalie | Super XLO | 15W-40 |
| BP | Vanellus C3-Extra | 15W-40 |
| Cato Oil | Mystik Synguard SX-8 | 15W-40 |
| Chevron | Delo 300 Motor Oil | 15W-40 |
| Kendall | SHP Super D 3 | 15W-40 15W-40 |
| Mobil | Delvac 1300 Super | 15W-40 |
| Pennzoil | Supreme Duty Fleet Motor Oil | 15W-40 |
| Quaker State Corp. | HDX Plus Universal Fleet HDX Multi-Grade Universal Fleet | 15W-40 15W-40 |
| Tennessee Farmers Agrotection | | 15W-40 |
| Texaco | Ursa Premium | 15W-40 |
| Unocal | Extra Duty Guardol Motor Oil 1300 Series Royal Triton QLT | 15W-40 15W-40 |
| Valvoline | All Fleet Extra | 15W-40 |



**Engine oils / Motorenöle /
Aceites de motor / Huiles moteur / Oli motore**

Engine oils for marine diesel engines, available on the US market.

Multigrade engine oils from the US market for engines subject to lower stress.

Motorenöle für Schiffsdieselmotoren, verfügbar auf dem US-Markt.

Mehrbereichsmotorenöle des US-Marktes für weniger belastete Motoren.

Aceites de motor para motores diesel marinos, disponibles en el mercado de los E.E.U.U..

Aceites de motor multigrados del mercado de los E.E.U.U. para motores menos cargados.

Huiles moteur pour moteurs Diesel marins, disponibles sur le marché américain.

Huiles moteur multigrades du marché américain pour moteurs soumis à des sollicitations moins importantes.

Oli per motori marini diesel, disponibili negli USA.

Oli motore multigrado del mercato americano per motori poco sollecitati.

| Engine oils with SHPD quality Motorenöle mit SHPD - Niveau Aceites de motor con nivel SHPD Huiles moteur de niveau SHPD Oli motore con qualità SHPD | | |
|--|---|---|
| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación producto Désignation du produit Denominazione prodotto | Viscosity class SAE Viskositätsklasse SAE Clase viscosidad SAE Viscosité SAE Classe di viscosità SAE |
| Amalie | Super SHP-LD | 15W-40 |
| Cato Oil | Mystik JT-8 Extra | 15W-40 |
| Drydene | Series IV Motor Oil | 15W-40 |
| Quaker State Corp. | Quaker Super Diesel | 15W-40 |
| Unosal | Extra Duty Guardol Motor Oil 1500 Series | 15W-40 |
| Valvoline | All Fleet Super | 15W-40 |



A series of horizontal dotted lines for writing notes.



A series of horizontal dotted lines for writing notes, spanning the width of the page.

Antifreezes with anti-corrosion agents for engine cooling systems

Gefrierschutzmittel mit Korrosionsschutz für Motorkühlsysteme

Anticongelantes con protección anticorrosiva para sistemas de refrigeración de motor

Antigel avec protection anticorrosion pour systèmes de refroidissement moteur

Antigelo con anticorrosivo per impianti di raffreddamento motore

| Approved to works standard MAN 324 Type N (containing nitrite) Zugelassen nach Werknorm MAN 324 Typ N (nitrihaltig) Autorizados conforme a la norma de fábrica MAN 324 Typ N (contiene nitrito) Autorisé selon norme usine MAN 324, type N (contient des nitrites) Approvato secondo la norma interna MAN 324 tipo N (contenenti nitriti) | |
|--|---|
| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación del producto Désignation du produit Denominazione prodotto |
| Agip Schmiertechnik GmbH | Agip / Autol Langzeitfrostschutz |
| Aral Lubricants GmbH | Aral Antifreeze T |
| Arteco N.V. | Havoline AF 007400+B |
| Avia Mineralöl AG | Avia Frostschutz |
| BASF AG | BASF Kühlerfrostschutz G 03 BASF Coolant D 824-13F BASF Coolant D 542 Glysantin 9313 |
| Bucher AG | Motorex Frostschutz G03 |
| Clariant GmbH | Genantin Extra B |
| Elf Lubrifiants | Elf Glacelf SX |
| EUROL Mineralöl Handelsges.m.b.H. | Eurol Afrostin |
| EVVA Schmiermittel-Fabrik GmbH | EVVA Antifreeze |
| Freiberg Chemikalien GmbH | Pro Car NKW |
| FUCHS Petrolub GmbH | Fuchs Fricofin Kühlerfrostschutz |
| GENOL GmbH & Co. | GENOL ANTIFREEZE |
| Huntsman Corporation Australia Pty Ltd. | Glycool 007/81/126 |
| INA Industrija Zagreb / Kroatien | INA Antifriz AI Super |
| KRAFFT S.A. / Spanien | Krafft REFRIGERANTE ACU 2300 |
| Petrol Ofisi A.S. | P.O. Antifriz |
| Shell Aseol AG | Aseol Antifreeze 26-30 |
| TOTALFINA | OZO Frostschutz S |



**Coolants / Kühlflüssigkeit / Líquidos refrigerantes /
Liquide de refroidissement / Liquido di raffreddamento**

| Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il | Product designation Produktbezeichnung Denominación del producto Désignation du produit Denominazione prodotto |
|--|---|
| Addinal Lube Oil GmbH | ADDINOL Antifreeze Super |
| Agip Petroli S.P.A. / ROM | Agip Antifreeze Plus |
| Aral Lubricants GmbH | Aral Antifreeze Extra |
| Arteco N.V. | Havoline AF 542 Havoline AFC |
| Avia Mineralöl AG | Avia Antifreeze APN |
| BASF AG | Glysantin® mit Protect Plus Glysantin G 48 |
| BP Southern Africa Ltd. | BP Isocool CT |
| Bucher AG | Motorex Antifreeze Protect Plus G48 |
| Caltex (UK) Ltd | Caltex CX Engine Coolant |
| Castrol Ltd. / England | Castrol ANTIFREEZE NF |
| DEA Mineralöl AG | DEA Kühlerfrostschutz |
| Elf Lubrifiants | Elf AF Special GLACELF MDX Glacelf Plus |
| Engen Petroleum Ltd. Südafrika | Engen Antifreeze and Summer Coolant |
| EVVA Schmiermittel-Fabrik GmbH | EVVA Antifreeze B |
| Ginouves Georges S.A. | York LT 716 |
| OMV Aktiengesellschaft | OMV Kühlerfrostschutz |
| Shell Chemicals | GlycoShell |
| TEDEX Oil Sp.z.o.o. | Tedex Antifreeze |
| TEDEX Vertriebs GmbH | Tedex Antifreeze |
| TOTALFINA | Fina Termidor Total Multiprotect |
| TOTAL South Africa Ltd. | TOTAL Summer Coolant TOTAL Antifreeze |
| Unico Manufacturing Co. Ltd. Südafrika | Engmans Antifreeze and Summer Coolant A.P. Lockheed Ultra Coolant |
| Valvoline International Europe | G 48 Antifreeze/Coolant |
| Veedol International Ltd. | Veedol ANTIFREEZE NF |



| <p align="center">Approved to works standard MAN 324 Type SNF (silicate- / nitrite-free) Zugelassen nach Werknorm MAN 324 Typ SNF (silikat- / nitritfrei) Autorizados conforme a la norma de fábrica MAN 324 Typ SNF (libre de silicatos / nitritos) Autorisé selon norme usine MAN 324, type SNF (exempt de silicates et de nitrites) Approvato secondo la norma interna MAN 324 tipo SNF (esente da nitriti e silicati)</p> | |
|---|---|
| <p align="center">Approval granted to Zulassung erteilt an Autorización entregada a Homologation décernée à Approvazione conferita il</p> | <p align="center">Product designation Produktbezeichnung Denominación del producto Désignation du produit Denominazione prodotto</p> |
| Agip Petroli S.P.A. / ROM | Agip Antifreeze Spezial |
| Aral Lubricants GmbH | Aral Antifreeze Silikatfrei |
| Artego N.V. | Texaco Havoline XLC+B(D) Havoline XLC |
| BASF AG | Glysantin ALU PROTECT Glysantin G 30 |
| Caltex (UK) Ltd. | Caltex Extended Life Coolant |
| Elf Lubrifiants | Glacelf Auto Supra |
| Texaco Technology Ghent | Havoline XLC+B |
| TOALFINA | TOTAL Organicool Fina Termidor Plus |
| WIGO WERK Kreuznach, Chem. Fabrik GmbH | ERONEX Kühlerfrostschutz DB/MAN VP 2425 |
| YACCO S.A. | Yacco LR Organique |



A series of horizontal dotted lines spanning the width of the page, providing a guide for writing notes.



MAN Nutzfahrzeuge Aktiengesellschaft

Vogelweiherstraße 33
D-90441 Nürnberg

Printed in Germany

51.99589-8001