



Transmissions for industrial and mobile applications

List of lubricants TE-ML 27

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1. Approved lubricant classes

| Product groups | Lubricant classes for service fills ^(1, 2) |
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| Gearboxes for industrial and mobile applications of ZF Industrieantriebe Witten GmbH GPT, GFC, GPT-W, GFB, GME, GMH, IMK, GPC, GFA, GP | 27A, 27B, 27C, 27D, 27E, 27F, 27G, 27H, 27I, 27J |

2. Explanation of footnotes and comments

Footnotes

- (1) The required viscosity class is described in the operating instruction or on the rating plate. In addition, the ZFN-W 17-184 in the operating instruction must be considered.
- (2) Refer to the following pages for approved commercial products.
- (3) The pour point helps the user to determine how suitable the gear oil is for use in cold weather. The specified pour point is based on the information supplied by the relevant manufacturer (product data sheet) at the time of creating this Standard. ZF Industrieantriebe Witten GmbH does not check or monitor this information. The pour point, as defined in DIN ISO 3016, is not the same as the oil's lowest operating temperature. If you require this information, please contact the lubricant manufacturer or supplier.

Comments

A lithium saponified multipurpose grease of NLGI class 3 which is mixable with mineral oil is to be used at greasing points (grease code KP3K-30 in acc. with DIN 51825 or ISO-L-XCCHB3 in accordance with ISO 6743-9).

Additives of any kind added **later** to the oil change the oil in a manner that is unpredictable, and they are therefore not permitted. No liability of any kind will be accepted by ZF for any damage resulting from the use of such additives.

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| The list of lubricants TE-ML 27, edition 01.04.2024 replaces all previous editions. The current list can be requested from any ZF after-sales service center or accessed on the Internet under www.aftermarket.zf.com/lubricants . | ZF Friedrichshafen AG D-88038 Friedrichshafen www.zf.com/contact |
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3. Lubricant classes and approved trade products

Lubricant class 27A

Lubricant CLP mineral oil

Viscosity class: ISO VG 100

| Manufacturer (27A) | Trade name (27A) | Pour point [°C] (3) |
|---------------------------|-------------------------|----------------------------|
| ADDINOL | ECO GEAR 100 M | -30 |
| EXXONMOBIL | MOBILGEAR 600 XP 100 | -24 |
| FUCHS PETROLUB | RENOLIN CLP PLUS 100 | -24 |
| OLMA d.o.o. | OLMAREDOL FL 100 | -18 |
| SHELL | OMALA S2 GX 100 | -24 |
| TOTAL | CARTER EP 100 | -21 |

Lubricant class 27B

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 100

Manufacturer (27B)FUCHS PETROLUB
KLÜBER LUBRICATION**Trade name (27B)**RENOLIN UNISYN CLP 100
KLÜBERSYNTH GEM 4-100 N**Pour point [°C] (3)**-53
-40

Lubricant class 27C

Lubricant CLP mineral oil

Viscosity class: ISO VG 150

| Manufacturer (27C) | Trade name (27C) | Pour point [°C] (3) |
|--|--|----------------------------|
| ADDINOL | ECO GEAR 150 M | -27 |
| ADVANCED LUBRICATION SPECIALTIES, INC. | ADVANTAGE AMP GEAR OIL 150 | -24 |
| EXXONMOBIL | MOBILGEAR 600 XP 150 | -24 |
| FUCHS PETROLUB | RENOLIN CLP PLUS 150 | -24 |
| MOTOREX | GEAR COMPOUND PLUS 150 | -24 |
| NILS S.p.A. | ATOIL MP 150 | -21 |
| OLMA d.o.o. | OLMAREDOL FL 150 | -18 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 150 | -24 |
| SHELL | OMALA S2 GX 150 | -24 |
| SUNOCO LUBRICANTS | SUNOCO SUNEP MPT GEAR OIL 150 | -24 |
| TOTAL | CARTER EP 150 | -21 |
| VERKOL S.A.U A QUAKER HOUGHTON COMPANY | COMPOUND MP 150 | -24 |
| YORK LUBRICANTS | YORK RE 5000 150 | -21 |

Lubricant class 27D

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 150

| Manufacturer (27D) | Trade name (27D) | Pour point [°C] (3) |
|---|---|----------------------------|
| EXXONMOBIL | MOBIL SHC GEAR 150 | -45 |
| FUCHS PETROLUB | RENOLIN UNISYN CLP 150 | -45 |
| KLÜBER LUBRICATION | KLÜBERSYNTH GEM 4-150N | -40 |
| MOTOREX | GEAR SINTEC CLP 150 | -57 |
| NILS S.P.A. | ATOIL SYNT MP | -48 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN FD3000N-B GEAR OIL 150 | -54 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 150 | -54 |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 150 | -51 |
| TOTAL | CARTER SH 150 | -48 |
| YORK SAS | YORK 897 150 | -51 |

Lubricant class 27E

Lubricant CLP mineral oil

Viscosity class: ISO VG 220

| Manufacturer (27E) | Trade name (27E) | Pour point [°C] (3) |
|--|--|----------------------------|
| ADDINOL | ECO GEAR 220 M | -21 |
| ADVANCED LUBRICATION SPECIALTIES, INC. | ADVANTAGE AMP GEAR OIL 220 | -21 |
| EXXONMOBIL | MOBILGEAR 600 XP 220 | -24 |
| FUCHS PETROLUB | RENOLIN CLP PLUS 220 | -24 |
| MOTOREX | GEAR COMPUND PLUS 220 | -24 |
| NILS S.p.A. | ATOIL MP 220 | -21 |
| OLMA d.o.o. | OLMAREDOL FL 220 | -12 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 220 | -21 |
| SHELL | OMALA S2 GX 220 | -18 |
| SUNOCO LUBRICANTS | SUNOCO SUNEP MPT GEAR OIL 220 | -21 |
| TOTAL | CARTER EP 220 | -21 |
| VERKOL S.A.U A QUAKER HOUGHTON COMPANY | COMPOUND MP 220 | -21 |
| YORK LUBRICANTS | YORK RE 5000 220 | -21 |

Lubricant class 27F

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 220

| Manufacturer (27F) | Trade name (27F) | Pour point [°C] (3) |
|---|---|----------------------------|
| ADDINOL | ECO GEAR S 220 | -42 |
| CHEVRON (CALTEX-CHEVRON-TEXACO) | MEROPA ELITESYN XM 220 | -39 |
| EXXONMOBIL | MOBIL SHC GEAR 220 | -39 |
| FUCHS PETROLUB | RENOLIN UNISYN CLP 220 | -42 |
| KLÜBER LUBRICATION | KLÜBERSYNTH GEM 4-220 N | -40 |
| MOTOREX | GEAR SINTEC CLP 220 | -45 |
| NILS S.P.A. | ATOIL SYNT MP 220 | -42 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN FD3000N-B GEAR OIL 220 | -48 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 220 | -48 |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 220 | -48 |
| SHELL | OMALA S4 GXV 220 | -42 |
| TOTAL | CARTER SH 220 | -45 |
| YORK SAS | YORK 897 220 | -48 |

Lubricant class 27G

Lubricant CLP mineral oil

Viscosity class: ISO VG 320

| Manufacturer (27G) | Trade name (27G) | Pour point [°C] (3) |
|--|--|----------------------------|
| ADDINOL | ECO GEAR 320 M | -15 |
| ADVANCED LUBRICATION SPECIALTIES, INC. | ADVANTAGE AMP GEAR OIL 320 | -15 |
| EXXONMOBIL | MOBILGEAR 600 XP 320 | -24 |
| FUCHS PETROLUB | RENOLIN CLP PLUS 320 | -18 |
| MOTOREX | GEAR COMPOUND PLUS 320 | -24 |
| OLMA d.o.o. | OLMAREDOL FL 320 | -13 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 320 | -15 |
| SHELL | OMALA S2 GX 320 | -15 |
| SUNOCO LUBRICANTS | SUNOCO SUNEP MPT GEAR OIL 320 | -15 |
| TOTAL | CARTER EP 320 | -15 |
| VERKOL S.A.U A QUAKER HOUGHTON COMPANY | COMPOUND MP 320 | -12 |

Lubricant class 27H

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 320

| Manufacturer (27H) | Trade name (27H) | Pourpoint [°C] (3) |
|---|---|---------------------------|
| ADDINOL | ECO GEAR S 320 | -43 |
| CHEVRON (CALTEX-CHEVRON-TEXACO) | MEROPA ELITESYN XM 320 | -39 |
| EXXONMOBIL | MOBIL SHC GEAR 320 | -33 |
| FUCHS PETROLUB | RENOLIN UNISYN CLP 320 | -42 |
| KLÜBER LUBRICATION | KLÜBERSYNTH GEM 4-320 N | -35 |
| NILS S.P.A. | ATOIL SYNT MP 320 | -42 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN FD3000N-B GEAR OIL 320 | -45 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 320 | -45 |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 320 | -45 |
| SHELL | OMALA S4 GXV 320 | -42 |
| TOTAL | CARTER SH 320 | -42 |
| YORK SAS | YORK 897 320 | -45 |

Lubricant class 27I

Lubricant CLP mineral oil

Viscosity class: ISO VG 460

| Manufacturer (27I) | Trade name (27I) | Pour point [°C] (3) |
|--|--|----------------------------|
| ADDINOL | ECO GEAR 460 M | -15 |
| ADVANCED LUBRICATION SPECIALTIES, INC. | ADVANTAGE AMP GEAR OIL 460 | -15 |
| EXXONMOBIL | MOBILGEAR 600 XP 460 | -15 |
| FUCHS PETROLUB | RENOLIN CLP PLUS 460 | -14 |
| OLMA d.o.o. | OLMAREDOL FL 460 | -13 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 460 | -15 |
| SHELL | OMALA S2 GX 460 | -12 |
| SUNOCO LUBRICANTS | SUNOCO SUNEP MPT GEAR OIL 460 | -15 |
| TOTAL | CARTER EP 460 | -12 |
| VERKOL S.A.U A QUAKER HOUGHTON COMPANY | COMPOUND MP 460 | -9 |

Lubricant class 27J

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 460

| Manufacturer (27J) | Trade name (27J) | Pour point [°C] (3) |
|---|---|----------------------------|
| ADDINOL | ECO GEAR S 460 | -40 |
| CHEVRON (CALTEX-CHEVRON-TEXACO) | MEROPA ELITESYN XM 460 | -36 |
| EXXONMOBIL | MOBIL SHC GEAR 460 | -27 |
| FUCHS PETROLUB | RENOLIN UNISYN CLP 460 | -39 |
| KLÜBER LUBRICATION | KLÜBERSYNTH GEM 4-460 N | -30 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN FD3000N-B GEAR OIL 460 | -48 |
| PETROCHINA LUBRICANT COMPANY | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 460 | -48 |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 460 | -42 |
| SHELL | OMALA S4 GXV 460 | -42 |
| TOTAL | CARTER SH 460 | -42 |