



Industrial Technology

## Transmissions for industrial and mobile applications

## List of lubricants TE-ML 27

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The list of lubricants TE-ML 27, **edition 01.07.2026** 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](http://www.aftermarket.zf.com/lubricants).

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Disclaimer: The lubricants and providers listed herein are presented solely for the purpose of documenting lubricants that were tested for compatibility with our products. This listing does not constitute an endorsement, recommendation, or preference for any of the mentioned lubricants, manufacturers, or providers. The inclusion of any lubricant in this list does not imply that it is superior to other available options, nor does it indicate that other lubricants or providers are unsuitable for use with our products. There may be additional lubricants, manufacturers, or providers — whether known or unknown to us — that are fully compatible or otherwise appropriate. It remains the sole responsibility of each customer to verify and comply with all applicable sanction laws and regulations prior to purchasing any of the mentioned lubricants.

## 1. Approved lubricant classes

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

## 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 Industriefahrzeuge 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.

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) |
|--------------------|----------------------|---------------------|
| EXXONMOBIL         | MOBILGEAR 600 XP 100 | -24                 |
| OLMA d.o.o.        | OLMAREDOL FL 100     | -18                 |
| SHELL              | OMALA S2 GX 100      | -24                 |

**Lubricant class 27B**

Lubricant CLP poly-alpha-olefin oils or partially synthetic  
Viscosity class: ISO VG 100

| Manufacturer (27B) | Trade name (27B)        | Pour point [°C] (3) |
|--------------------|-------------------------|---------------------|
| KLÜBER LUBRICATION | KLÜBERSYNTH GEM 4-100 N | -40                 |

**Lubricant class 27C**

Lubricant CLP mineral oil

Viscosity class: ISO VG 150

| <b>Manufacturer (27C)</b>    | <b>Trade name (27C)</b>                       | <b>Pour point [°C] (3)</b> |
|------------------------------|---|----------------------------|
| EXXONMOBIL                   | MOBILGEAR 600 XP 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                        |
| SINOPEC LUBRICANT CO., LTD.  | AP INDUSTRIAL GEAR OIL 150                    | -23                        |
| YORK SAS                     | YORK RE 5000 150                              | -21                        |

**Lubricant class 27D**

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 150

| <b>Manufacturer (27D)</b>                             | <b>Trade name (27D)</b>                                   | <b>Pour point [°C] (3)</b> |
|---|---|----------------------------|
| DEUTSCHE ÖLWERKE LUBMIN                               | AVENO GEAR ULTIMATE FLD 150                               | -54                        |
| EXXONMOBIL  | MOBIL SHC GEAR 150  | -54                        |
| KLÜBER LUBRICATION                                    | KLÜBERSYNTH GEM 4-150N                                    | -40                        |
| NILS S.P.A.   | ATOIL SYNT MP 150   | -48                        |
| PETRO CANADA  | ENDURATEX SYNTHETIC EP 150                                | -54                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN FD3000N-B GEAR OIL 150                             | -54                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 150 | -54                        |
| RAVENSBERGER SCHMIERSTOFFVERTRIEB                     | RAVENOL SYNTHETIC WIND TURBINES SWT 150                   | -54                        |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 150                                       | -51                        |
| SINOPEC LUBRICANT CO., LTD.                           | AP-S INDUSTRIAL GEAR OIL 150                              | -51                        |
| 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) |
|------------------------------|---|---------------------|
| EXXONMOBIL                   | MOBILGEAR 600 XP 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                 |
| SINOPEC LUBRICANT CO., LTD.  | AP INDUSTRIAL GEAR OIL 220                    | -20                 |
| YORK SAS                     | YORK RE 5000 220                              | -21                 |

**Lubricant class 27F**

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 220

| <b>Manufacturer (27F)</b>                             | <b>Trade name (27F)</b>                                   | <b>Pour point [°C] (3)</b> |
|---|---|----------------------------|
| CHAMPION CHEMICALS N.V.                               | CHAMPION EP GEAR SYN PAO 220                              | -42                        |
| CHEVRON (CALTEX-CHEVRON-TEXACO)                       | MEROPA ELITESYN XM 220                                    | -36                        |
| DEUTSCHE ÖLWERKE LUBMIN                               | AVENO GEAR ULTIMATE FLD 220                               | -51                        |
| EXXONMOBIL  | MOBIL SHC GEAR 220  | -45                        |
| GULF OIL INTERNATIONAL LTD                            | GULF GEARTEK SHD 220                                      | -36                        |
| KLÜBER LUBRICATION                                    | KLÜBERSYNTH GEM 4-220 N                                   | -40                        |
| NILS S.P.A.   | ATOIL SYNT MP 220   | -45                        |
| PETRO CANADA  | ENDURATEX SYNTHETIC EP 220                                | -51                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN FD3000N-B GEAR OIL 220                             | -48                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 220 | -48                        |
| RAVENSBERGER SCHMIERSTOFFVERTRIEB                     | RAVENOL SYNTHETIC WIND TURBINES SWT 220                   | -51                        |
| SAVITA OIL TECHNOLOGIES LTD                           | SAVSOL SYNTH GEAR 220                                     | -42                        |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 220                                       | -48                        |
| SHELL   | OMALA S4 GXV 220  | -42                        |
| SINOPEC LUBRICANT CO., LTD.                           | AP-S INDUSTRIAL GEAR OIL 220                              | -48                        |
| WOLF OIL CORPORATION N.V.                             | WOLF AROWEP SYN PAO 220                                   | -42                        |
| YORK SAS  | YORK 897 220  | -48                        |



**Lubricant class 27G**

Lubricant CLP mineral oil

Viscosity class: ISO VG 320

**Manufacturer (27G)**

EXXONMOBIL

OLMA d.o.o.

PETROCHINA LUBRICANT COMPANY

SHELL

SINOPEC LUBRICANT CO., LTD.

**Trade name (27G)**

MOBILGEAR 600 XP 320

OLMAREDOL FL 320

KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 320

OMALA S2 GX 320

AP INDUSTRIAL GEAR OIL 320

**Pour point [°C] (3)**

-24

-13

-15

-15

-17

**Lubricant class 27H**

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 320

| <b>Manufacturer (27H)</b>                             | <b>Trade name (27H)</b>                                   | <b>Pour point [°C] (3)</b> |
|---|---|----------------------------|
| CHAMPION CHEMICALS N.V.                               | CHAMPION EP GEAR SYN PAO 320                              | -45                        |
| CHEVRON (CALTEX-CHEVRON-TEXACO)                       | MEROPA ELITESYN XM 320                                    | -36                        |
| DEUTSCHE ÖLWERKE LUBMIN                               | AVENO GEAR ULTIMATE FLD 320                               | -48                        |
| EXXONMOBIL  | MOBIL SHC GEAR 320  | -48                        |
| GULF OIL INTERNATIONAL LTD                            | GULF GEARTEK SHD 320                                      | -39                        |
| KLÜBER LUBRICATION                                    | KLÜBERSYNTH GEM 4-320 N                                   | -35                        |
| NILS S.P.A.   | ATOIL SYNT MP 320   | -42                        |
| PETRO CANADA  | ENDURATEX SYNTHETIC EP 320                                | -48                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN FD3000N-B GEAR OIL 320                             | -45                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 320 | -45                        |
| RAVENSBERGER SCHMIERSTOFFVERTRIEB                     | RAVENOL SYNTHETIC WIND TURBINES SWT 320                   | -48                        |
| SAVITA OIL TECHNOLOGIES LTD                           | SAVSOL SYNTH GEAR 320                                     | -42                        |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 320                                       | -45                        |
| SHELL   | OMALA S4 GXV 320  | -42                        |
| SINOPEC LUBRICANT CO., LTD.                           | AP-S INDUSTRIAL GEAR OIL 320                              | -42                        |
| WOLF OIL CORPORATION N.V.                             | WOLF AROWEP SYN PAO 320                                   | -45                        |
| YORK SAS  | YORK 897 320  | -45                        |

**Lubricant class 27I**

Lubricant CLP mineral oil

Viscosity class: ISO VG 460

**Manufacturer (27I)**

EXXONMOBIL

OLMA d.o.o.

PETROCHINA LUBRICANT COMPANY

SHELL

SINOPEC LUBRICANT CO., LTD.

**Trade name (27I)**

MOBILGEAR 600 XP 460

OLMAREDOL FL 460

KUNLUN KPM HEAVY-DUTY INDUSTRIAL GEAR OIL 460

OMALA S2 GX 460

AP INDUSTRIAL GEAR OIL 460

**Pour point [°C] (3)**

-15

-13

-15

-12

-11

**Lubricant class 27J**

Lubricant CLP poly-alpha-olefin oils or partially synthetic

Viscosity class: ISO VG 460

| <b>Manufacturer (27J)</b>                             | <b>Trade name (27J)</b>                                   | <b>Pour point [°C] (3)</b> |
|---|---|----------------------------|
| CHEVRON (CALTEX-CHEVRON-TEXACO)                       | MEROPA ELITESYN XM 460                                    | -36                        |
| DEUTSCHE ÖLWERKE LUBMIN                               | AVENO GEAR ULTIMATE FLD 460                               | -45                        |
| EXXONMOBIL  | MOBIL SHC GEAR 460  | -48                        |
| GULF OIL INTERNATIONAL LTD                            | GULF GEARTEK SHD 460                                      | -39                        |
| KLÜBER LUBRICATION                                    | KLÜBERSYNTH GEM 4-460 N                                   | -30                        |
| PETRO CANADA  | ENDURATEX SYNTHETIC EP 460                                | -45                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN FD3000N-B GEAR OIL 460                             | -48                        |
| PETROCHINA LUBRICANT COMPANY                          | KUNLUN KPM/S SYNTHETIC HEAVY-DUTY INDUSTRIAL GEAR OIL 460 | -48                        |
| RAVENSBERGER SCHMIERSTOFFVERTRIEB                     | RAVENOL SYNTHETIC WIND TURBINES SWT 460                   | -45                        |
| SAVITA OIL TECHNOLOGIES LTD                           | SAVSOL SYNTH GEAR 460                                     | -42                        |
| SHANXI LU'AN TAIHANG LUBRICATING TECHNOLOGY CO., LTD. | TAIHANG GEAR WT 460                                       | -42                        |
| SHELL   | OMALA S4 GXV 460  | -42                        |
| SINOPEC LUBRICANT CO., LTD.                           | AP-S INDUSTRIAL GEAR OIL 460                              | -42                        |