



**Manual and automatic transmissions
for trucks, buses and light commercial vehicles
with "TE-ML 02" entry on the type plate**

List of lubricants TE-ML 02

Table of contents	page
1. Approved lubricant classes	1
1.1 Trucks and special applications	1
1.2 Buses	4
1.3 Light commercial vehicles	4
1.4 Product groups/Models/Versions from the past, not individually listed	5
2. Oil and filter change intervals	6
3. Low temperatures limits	7
4. Explanation of footnotes and comments	7
5. Lubricant classes and approved trade products	as from 8

1. Approved lubricant classes

1.1 Trucks and special applications

Product groups trucks Note: Instead of the "0" as the last figure, there may also be a: 2;3;4;5. (Example: 12AS1935, 16S2223)	Lubricant classes	
	First fill ⁽⁵⁾	Service fill ⁽⁶⁾
Ecolite S5-42, S6-36, S6-36/2, S5-420	ZF-Ecofluid M 02B ₍₁₎ / 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02F / 02L
S5-580	ZF-Ecofluid M 02B ₍₁₎ / 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02L
6S500	02B	02B
Ecolite / AS Tronic lite 6S850, 6AS850	ZF-Ecofluid M 02B ₍₁₎ / 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H ₍₁₎ / 02L
Ecolite 6S1200TO, 6S1200TD	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H ₍₁₎	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H ₍₁₎ / 02L
Ecolite / AS Tronic lite 6S700TO, 6AS700TO, 6S800TO, 6AS800TO, 6S1000TO, 6AS1000TO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02L
AS Tronic lite Hydraulic actuators	02K	02K

The list of lubricants TE-ML 02, **Edition 01.04.2014** replaces all previous editions. The current list can be requested from any ZF after-sales service center or accessed on the Internet under www.zf.com/lubricants.

ZF Friedrichshafen AG
D-88038 Friedrichshafen
phone: + 49 7541 77 3505
fax: + 49 7541 77 7319

Product groups trucks (continuation) Note: Instead of the "0" as the last figure, there may also be a: 2;3;4;5. (Example: 12AS1935, 16S2223)	Lubricant classes	
	First fill (5)	Service fill (6)
Ecomid without Intarder 9S75, 8S109, 9S109, 16S109	ZF-Ecofluid M 02B / 02E / 02H	ZF-Ecofluid M 02B / 02E / 02H / 02L
Ecomid with Intarder 8S109IT, 9S109IT, 16S109IT	ZF-Ecofluid M 02E / 02H	ZF-Ecofluid M 02E / 02H / 02L
Ecomid without Intarder 8S1110, 9S1110, 9S1310	ZF-Ecofluid M 02B / 02E	ZF-Ecofluid M 02B / 02E / 02L
Ecomid with Intarder 8S1111, 9S1111, 9S1311	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
AS Tronic mid 12AS1010, 12AS1210, 12AS1220, 12AS1420, 12AS1620	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L
Ecosplit without Intarder 8S151, 16S151, 8S181, 16S181, 16S221, 16S251 8S1620, 16S1620, 8S1820, 16S1820, 8S1920, 16S1920, 16S2020, 8S2220, 16S2220, 16S2520, 16S2720 16S1580, 16S1680, 16S2180, 16S2280	ZF-Ecofluid M 02B / 02E / 02H	ZF-Ecofluid M 02B / 02E / 02H / 02L
Ecosplit with Intarder 8S151IT, 16S151IT, 8S181IT, 16S181IT, 16S221IT, 16S251IT 8S1621, 16S1621, 8S1821, 16S1821, 8S1921, 16S1921, 16S2021, 8S2221, 16S2221, 16S2521, 16S2721 16S1581, 16S1681, 16S2181, 16S2281	ZF-Ecofluid M 02E / 02H	ZF-Ecofluid M 02E / 02H / 02L
Ecosplit without Intarder 16S2320, 16S2330	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L
12S2130, 12S2330, 12S2830	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L
8S1630, 16S1630, 8S1830, 16S1830, 8S1930, 16S1930, 16S2030, 8S2230, 16S2230, 16S2530, 16S2733	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02H / 02L
Ecosplit with Intarder 16S2321, 16S2331	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
12S2131, 12S2331, 12S2831	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
16S1631, 8S1831, 16S1831, 8S1931, 16S1931, 16S2031, 8S2231, 16S2231, 16S2531, 16S2731	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02H / 02L
Classic Line 8S1350, 16S1455TD, 16S1650, 16S1670, 16S1850, 16S1950, 9S1820, 16S1650HD S6-1550, S6-820, S5-680, S6-680, S5-820	ZF-Ecofluid M 02B / 02E / 02H	ZF-Ecofluid M 02B / 02E / 02H / 02L
AS Tronic without Intarder 12AS1630, 12AS1930, 12AS2130, 12AS2140, 12AS2300, 12AS2301, 12AS2330, 12AS2340, 12AS2501, 12AS2530, 12AS2540, 12AS2740, 12AS2940, 12AS3001, 12AS3002, 12AS3140, 16AS2230, 16AS2600, 16AS2601, 16AS2630	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L

Product groups trucks (continuation) Note: Instead of the "0" as the last figure, there may also be a: 2;3;4;5. (Example: 12AS1935, 16S2223)	Lubricant classes	
	First fill (5)	Service fill (6)
AS Tronic with Intarder 12AS1631, 12AS1931, 12AS2131, 12AS2141, 12AS2300IT, 12AS2301IT, 12AS2331, 12AS2341, 12AS2501IT, 12AS2531, 12AS2541, 12AS2741, 12AS2941, 12AS3001IT, 12AS3002IT, 12AS3141, 16AS2231, 16AS2600IT, 16AS2601IT, 16AS2631	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
TraXon without Intarder 12TX1410, 12TX1610, 12TX1810, 12TX2010, 12TX2210, 12TX2410, 12TX 2610, 12TX2420, 12TX2620, 12TX2820, 12TX3020, 12TX3220, 12TX3420 16TX1640, 16TX1840, 16TX2040, 16TX2240, 16TX2440, 16TX2640, 16XT2840, 16TX3040, 16TX3240, 16TX3440	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
TraXon with Intarder 12TX1411, 12TX1611, 12TX1811, 12TX2011, 12TX2211, 12TX2411, 12TX 2611, 12TX2421, 12TX2621, 12TX2821, 12TX3021, 12TX3221, 12TX3421 16TX1641, 16TX1841, 16TX2041, 16TX2241, 16TX2441, 16TX2641, 16XT2841, 16TX3041, 16TX3241, 16TX3441	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
Transmatic (Joint oil circuit of basic transmission and converter lock-up clutches) 16S151WSK, 16S221WSK, 16S251WSK	02H(2)	02H(2)
TC Tronic (Separate oil circuit of basic transmission and converter lock-up clutches) Basic transmission: 12TC2540, 12TC2740	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L
Torque converter lock-up clutches: TC 2	02H(2) / ATF nach TE-ML 14(7)	02H(2) / ATF nach TE-ML 14(7)
TC Tronic HD (Heavy Duty) (Separate oil circuit of basic transmission and converter lock-up clutches) Basic transmission: 12AS3040TCIT	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
Torque converter lock-up clutches: TCHD	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E
NMV 1600L1, 2000L1, 2003L1, 1075K1 (engine-dependent PTO" with independent oil circuit)	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L

1.2 Buses

Product groups buses	Lubricant classes	
	First fill ⁽⁵⁾	Service fill ⁽⁶⁾
Ecolite S5-42, S6-36, S6-36/2, 5S600BO	ZF-Ecofluid M 02B ₍₁₎ / 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02F / 02L
Ecolite 6S890, 6S700BO	ZF-Ecofluid M 02B ₍₁₎ / 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H / 02L
Ecolite without Intarder S6-85, 6S1000BO, 6S1000BD, 6S1200BO, 6S1200BD, 6S1350BO, 6S1600BD, 6S1650BO, 6S1700BO, 6S1900BO	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02H / 02L
Ecolite with Intarder 6S1351BO, 6S1601BD, 6S1651BO, 6S1901BO, 6S1701BO	ZF-Ecofluid M 02E / 02H	ZF-Ecofluid M 02E / 02H / 02L
Ecolite / AS Tronic lite 6S710BO, 6AS710BO, 6S1010BO, 6AS1010BO, 6S1110BO, 6AS1110BO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B ₍₁₎ / 02E / 02L
AS Tronic lite Hydraulic actuators	02K	02K
Ecomid without Intarder 8S180, 8S2100BO, 8S2100BD	ZF-Ecofluid M 02B / 02E / 02H	ZF-Ecofluid M 02B / 02E / 02H / 02L
Ecomid with Intarder 8S180IT, 8S2101BO, 8S2101BD	ZF-Ecofluid M 02E / 02H	ZF-Ecofluid M 02E / 02H / 02L
Classic Line S6-1550, S6-820, S5-680, S6-680, S5-820, 6S1380BD	ZF-Ecofluid M 02B / 02E / 02H	ZF-Ecofluid M 02B / 02E / 02H / 02L
AS Tronic without Intarder 10AS2300BO, 10AS2310B, 10AS2700BO, 12AS2000BO, 12AS2300BO, 12AS2301, 12AS2700BO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02L
AS Tronic with Intarder 10AS2010BIT, 10AS2301IT, 10AS2310BIT, 12AS1601BO, 12AS2000BIT, 12AS2001BO, 12AS2300BIT, 12AS2301IT, 12AS2301BO, 12AS2701BO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
Ecoshift without Intarder 6S1310BD, 6S1310BO, 6S1610BD, 6S1610BO, 6S1910BO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L
Ecoshift with Intarder 6S1311BD, 6S1311BO, 6S1611BD, 6S1611BO, 6S1911BO, 6S2111BO	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E / 02L

1.3 Light commercial vehicles

Product groups	Lubricants / Lubricant classes	
	First fill (5)	Service fill (6)
Light commercial vehicles		
5S200VO, 5S270VO, 6S300VD, 6S320VD, 6S350VD, 6S380VO, 6S420VO	ZF-Ecofluid M 02E Petronas Gear Oil T.E. LD SAE 75W-80 Total Tranself LD SAE 75W80	ZF-Ecofluid M 02B / 02E / 02L
eTronic 6AS300VD, 6AS320VD, 6AS380VO, 6AS400VO, 6AS420VO	Petronas Gear Oil T.E. LD SAE 75W-80 Total Tranself LD SAE 75W80	ZF-Ecofluid M 02B / 02E / 02L
6S650, 6S720, 6S750	ZF-Ecofluid M 02E	ZF-Ecofluid M 02B / 02E / 02F / 02L
6S450 VW Amarok	ZF-Ecofluid M VW spare part no. G 055 538 A2	
6S450 Mercedes-Benz Sprinter	ZF-Ecofluid M 02E	ZF-Ecofluid M 02E Exxon Mobil Gear Oil MB 317 Mercedes-Benz MB 235.10 -- Manuel Transmission Oil A 001 989 26 03
5S400	Fuchs Titan EG MP 80 Petronas TUTELA OTZ (80W-90)	02B

1.4 Product groups/Models/Versions from the past, not individually listed

Product groups/Models/Versions	Lubricant classes
Torque converter lock-up clutches (WSK) with separate oil circuit	02H(2) / ATF in accordance with TE-ML 14(7)
Transmissions without ZF-Intarder AS Tronic 1 (12AS1800, 16AS2200) Constant-mesh and synchronised transmissions for commercial vehicles	ZF-Ecofluid M 02B / 02E / 02H / 02L
Transmissions with ZF-Intarder AS Tronic 1 (12AS1800IT, 16AS2200IT) Constant-mesh and synchronised transmissions for commercial vehicles	ZF-Ecofluid M 02E / 02H / 02L

2. Oil and filter change intervals (filter replacement affects only transmission with Intarder or WSK [torque converter clutch])

Caution: Please refer to the previous pages, Section 1, tables, for information on the lubricant classes released for the individual product groups.

ZF-Ecofluid M was specially designed for applications with manual transmissions and automatic transmissions in commercial vehicles. The combination of a hydrocrack base oil with a specially balanced additive package ensures excellent oxidation stability and is thus excellently suited for very long oil change intervals. It warrants high-quality transmission component protection, in particular of the synchronizers and the gearings. As a result of the flat viscosity characteristic curve, the oil is suited for applications in all climate zones, particularly in hot and cold regions. Moreover, in comparison with mineral transmission fluids, ZF-Ecofluid M helps to reduce fuel consumption by 0.5 up to 1.0%.







Truck, bus and special applications according to sections 1.1, 1.2, and 1.4

Lubricant class	02B, 02F, 02H, ATF	02L	ZF-Ecofluid M 02E	02K
Application	Oil and filter change intervals ⁽³⁾			
- Off-road operation e.g. mining application - Average speed up to 20 km/h - Stationary drives - NMV	1.000 h 20.000 km 1 year	5.000 h 100.000 km 1 year	10.000 h 200.000 km 2 years ⁽⁴⁾	---
- Outside temperatures > 40°C - Long-distance transport > 44 t - Short-distance transport - Tough operating conditions - Scheduled routes (buses) - Average speed from 20 to 60 km/h	120.000 km 1 year	240.000 km 2 years	360.000 km 3 years ⁽⁴⁾	---
- Long-distance transport (trucks) - Long-distance coach journeys (buses) - Average speed as of 60 km/h	180.000 km 1 year	360.000 km 2 years	540.000 km 3 years ⁽⁴⁾	---
- Hydraulic actuators	---	---	---	no oil change needed

Light commercial vehicles according to section 1.3

Lubricants / Lubricant classes	Oil change intervals
02B, 02F Fuchs Titan EG MP 80 Petronas TUTELA OTZ (80W-90)	60.000 km
02L Total Tranself LD 75W-80 Petronas Gear Oil T.E. LD SAE 75W-80	240.000 km
ZF-Ecofluid M / 02E Exxon Mobil Gear Oil MB 317 Mercedes-Benz MB 235.10 -- Manuel Transmission Oil A 001 989 26 03	no oil change needed

3. Low temperatures limits

Lubricant classes	Oil type / SAE viscosity grade	Initial vehicle start-up at oil sump temperatures
ZF-Ecofluid M 02B / 02E / 02F / 02K / 02L / ATF	75W / 75W-80 / 75W-85 / 75W-90 / ATF	- 40°C 
02B / 02H	80W / 80W-85 / 80W-90	- 20°C 
02B / 02H	40, 85W-90, 90	0°C 
	30	- 15°C 
	20W (Torque converter lock-up clutches TC 2 only)	- 40°C 
	20W (Transmatic only)	- 40°C  -5°C

4. Explanation of footnotes and comments

Footnotes

- (1) In moderate climate zones, shift quality of non-automated transmissions is impaired when using the lubrication classes 02B / 02H.
- (2) Lubricants marked (*) on the following pages must not be used.
- (3) Oil and filter change required, depending on what occurs first. Only use genuine ZF filter inserts.
 - Intarder 2: 6085 298 026
 - Intarder 3: 0501 215 163
 - WSK: 0501 202 378
- (4) These intervals only apply to a hose breather in a dry area. If there is no hose breather in the dry area, the oil change intervals specified for lubricant class 02L apply. This restriction does not apply to TraXon and bus applications.
 In the case of transmissions filled ex-works with lubricant class 02E, no oil change must be effected during the first two years as of initial registration. In case of retrofitting or repair in this period, oil refills with lubricant class 02E or 02L are permitted.
 Exception: The limits of application in accordance with the TE-ML 02 (operating hours, mileage [km]) are already met prior to the expiration of the first two years.
- (5) First filling: Only the lubricant classes listed are permitted for initial fillings of transmissions.
- (6) Service filling: The lubricant classes listed are compulsory for service oil changes according to the oil-change intervals mentioned under Section 2. In case of oil changes at transmission mileage of up to 7 500 km, only oils for initial fillings must be used. In the case of transmissions filled ex-works with lubricant class 02E, due attention must always be paid to footer 4.
- (7) All lubricants of TE-ML 14 may be used. Oil change intervals and temperature limits of TE-ML 02 do apply.

Comments:

1. Instructions for transmission ventilation in accordance with Installation Guidelines 1203 765 110 and 1328 765 101 must be followed.
2. A lithium saponified multipurpose grease of NLGI class 2 which is mixable with mineral oil is to be used at greasing points (grease code KP2K-30 in acc. with DIN 51825 or ISO-L-XCCHB2 in accordance with ISO 6743-9).
3. 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.
4. ZF will not assume liability for damage caused by non-observance of our maintenance instructions.

5. Lubricant classes and approved trade products

Lubricant class 02A

Note:

Oils formerly approved according to lubricant class 02A are now found in lubricant class 02B.

Lubricant class 02B

Note:

In moderate climate zones, shift quality is impaired if viscosity grades higher than SAE 80W are used.

Manufacturer (02B)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 AVIA MINERALÖL-AG, MÜNCHEN/DE
 AVISTA OIL REFINING & TRADING DEUTSCHLAN, UETZE/DE
 AVISTA OIL REFINING & TRADING DEUTSCHLAN, UETZE/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BP PLC., LONDON/GB
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 BUCHER AG LANGENTHAL, LANGENTHAL/CH
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CASTROL LTD, LONDON/GB
 CEPSA COMERCIAL PETRÓLEO, MADRID/ES
 CEPSA COMERCIAL PETRÓLEO, MADRID/ES
 CEPSA COMERCIAL PETRÓLEO, MADRID/ES
 CEPSA COMERCIAL PETRÓLEO, MADRID/ES
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CLAAS KGAA MBH, HARSEWINKEL/DE
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR
 DAF TRUCKS NV, EINDHOVEN/NL
 DE OLIEBRON BV, ZWIJNDRECHT/NL
 DE OLIEBRON BV, ZWIJNDRECHT/NL
 DEEP OIL TRADING COMPANY LLP, LONDON/GB
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 FABRIKA MAZIVA FAM AD, KRUEVAC/RS
 FABRIKA MAZIVA FAM AD, KRUEVAC/RS
 FUCHS PETROLUB AG, MANNHEIM/DE
 FUCHS PETROLUB AG, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE
 GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE
 GRUPA LOTOS S.A., GDANSK/PL
 GRUPA LOTOS S.A., GDANSK/PL
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN

Trade name (02B)

ADDINOL GETRIEBEÖL GS 80W
 ADDINOL GETRIEBEÖL GS 80W-90
 ADDINOL GETRIEBEÖL GX 80W-90 ML
 ARAL GETRIEBEÖL EP 80W
 ARAL GETRIEBEÖL EP 85W-90
 ARAL GETRIEBEÖL EP PLUS 80W-90
 ARAL GETRIEBEÖL EP PLUS 80W-90
 ARAL GETRIEBEÖL SNA-E 75W-90
 AVIA SYNTOGear FE 80W-90
 PENNASOL MULTIPURPOSE GEAR OIL GL 4 SAE 80W
 PENNASOL MULTIPURPOSE GEAR OIL GL 4 SAE 90
 TECTROL MULTIGEAR PLUS 8090
 TECTROL UNIGEAR 80
 BELGEAR EP MB 80
 BP ENERGEGAR EP 80W
 BP ENERGEGAR EP 80W-90
 BP ENERGEGAR HT 80W-90
 BP ENERGEGAR SHX-M 75W-90
 GEAR OIL EP 80W
 UNISYNT ZX SAE 75W90
 CASTROL MANUAL EP 80W
 CASTROL MANUAL EP 80W-90
 CASTROL SYNTRAX UNIVERSAL 80W-90
 SYNTRAX UNIVERSAL PLUS 75W-90
 CEPSA TRANSMISIONES 80W-90
 CEPSA TRANSMISIONES EP FE+LD 75W-90
 ERTOil TRANSMISIONES F SAE 80W
 MAN SUPER AXLE 3343
 GEARTEX EP-A 80W
 GEARTEX EP-A 80W-90
 GEARTEX EP-A 85W-90
 MULTIGEAR 80W-90
 MULTIGEAR S 75W-90
 TRANSLUBE LD SAE 80W
 TRANSLUBE LD SAE 90
 UNIVERSAL EP SAE 80W
 CLAAS AGRISHIFT 4 SC 80W-90
 GEAR TDM 80W
 GEAR TXS 75W90
 DAF SUPER 80W-90
 TOR MULTIPURPOSE GEAR OIL SAE 80W90
 TOR UNI GEAR LD 75W90
 DRIVE RW FORCE S GL-5 75W-90
 MOBILUBE 1 SHC 75W-90
 MOBILUBE GX-A 80W
 MOBILUBE GX-A 80W
 MOBILUBE S 80W-90
 MULTIHIPO 75W-90 SINT
 MULTIHIPO 80W-90 F PLUS
 FUCHS TITAN GEAR MP SAE 80
 FUCHS TITAN SUPERGEAR MC SAE 80W-90
 G-BOX EXPERT GL-4 80W-85
 G-BOX GL-4/GL-5 75W-90
 G-TRUCK GL-4 80W-90
 G-TRUCK GL-4/GL-5 80W-90
 GAZPROMNEFT GL-4 80W-85
 GAZPROMNEFT GL-4 80W-90
 OEST GETRIEBEÖL FE SAE 80W-90 GL4/5
 OEST SYNTH GETRIEBEÖL SAE 75W-90
 TITANIS SUPER GL-5 75W/90
 TITANIS SUPER GL-5 80W-90
 GULF GEAR MZ 80W
 GULF GEAR MZ 80W-90
 GULF GEAR MZ 85W-90
 GULF GEAR MZ 90
 GULF GEAR TDL 80W-90
 GULF GEAR XP 80W

GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HARMS MINERALÖLE, PRISDORF/DE
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN
 HUILES BERLIET S.A., SAINT-PRIEST/FR
 HUILES BERLIET S.A., SAINT-PRIEST/FR
 IGOL FRANCE, AMIENS/FR
 IGOL FRANCE, AMIENS/FR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INDIAN OIL CORPORATION LTD, MUMBAI/IN
 INDIAN OIL CORPORATION LTD, MUMBAI/IN
 INDIAN OIL CORPORATION LTD, MUMBAI/IN
 IPIRANGA PRODUTOS DE PETROLEO SA, RIO DE JANEIRO/BR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 LIQUI MOLY GMBH, ULM/DE
 LIQUI MOLY GMBH, ULM/DE
 LIQUI MOLY GMBH, ULM/DE
 LUKOIL LUBRICANTS AUSTRIA GMBH, VIENNA/AT
 LUKOIL LUBRICANTS AUSTRIA GMBH, VIENNA/AT
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MOL-LUB KFT, ALMASFUZITO/HU
 MORRIS LUBRICANTS, SHREWSBURY/GB
 MOTUL SA, AUBERVILLIERS/FR
 MOTUL SA, AUBERVILLIERS/FR
 NESTE MARKKINOINTI OY, ESPOO/FI
 NIS AD, NOVI SAD/RS
 OMV PETROL OFISI A.S., ISTANBUL/TR
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 ORLEN OIL SP. Z O.O., KRAKOW/PL
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PANOLIN AG, MADETSWIL/CH
 PANOLIN AG, MADETSWIL/CH
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROGAL S.A., LISBOA/PT
 PETROGAL S.A., LISBOA/PT
 PETROGAL S.A., LISBOA/PT
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 PT. PERTAMINA, JAKARTA/ID
 PTT PUBLIC COMPANY LIMITED, BANGKOK/TH
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 RN-LUBRICANTS, LLC, MOSCOW/RU
 SASOL OIL, RANDBURG/ZA
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB

GULF GEAR XP 80W
 GULF GEAR XP 80W
 GULF GEAR XP 80W-90
 GULF GEAR XP 90
 GULF GEAR XP DURA MAX 80W-90
 GULF GEAR XP MAX 90
 GULF SYNGEAR 75W-90
 OILFINO VARIUS G 300 SAE 80W-90
 HP GEAR OIL ZFL 80W
 HP GEAR OIL ZFL 80W 90
 RTO LONGEVIA P ECO 80W-90
 RTO LONGEVIA TCX ECO 75W-90
 GEAR M 80W-90
 SYNTHEGEAR 75W-90
 INA HIPENOL SHD 75W-90
 INA HIPENOL TDL 80W-90
 INA TRANSMOL DB 80W
 INA TRANSMOL HD 80W-90
 SERVO GEAR ALT 90
 SERVO GEAR HP 80W-90 (T)
 SERVO UNIDRIVE 80W-90
 IPIRANGA ULTRAGEAR MB 80W
 Q8 GEAR OIL XG SAE 80W-90
 Q8 T 35 SAE 80W
 Q8 T 35 SAE 80W-90
 Q8 TRANS XGS 75W-90
 LIQUI MOLY GETRIEBEÖL GL4 SAE 80W
 LIQUI MOLY HYPOID GETRIEBEÖL TDL SAE 80W-90
 LIQUI MOLY VOLLSYNTH. HYPOID GETRIEBEÖL TRUCK
 OMV UNIGEAR S SAE 75W-90
 OMV UNIGEAR SAE 80W-90
 MEGOL GETRIEBEOEL TRUCK-SYNTH SAE 75W-90
 MEGOL HYPOID-GETRIEBEOEL TDL 80W-90
 MEGOL MEHRZWECKGETRIEBEOEL GL 4 SAE 80W
 MOL HYKOMOL 80W
 LODEXOL 80W-90
 MOTUL GEAR MB 80W
 MOTUL GEAR SYNTH TDL 75W-90
 NESTE GEAR EP 80W-90
 NISOTEC HIPO LD ZF SAE 80W-90
 MAXIGEAR D 75W-90
 LUKOIL TRANSMISSION TM-4 80W-85
 LUKOIL TRANSMISSION TM-4 80W-85
 LUKOIL TRANSMISSION TM-4 80W-90
 LUKOIL TRANSMISSION TM-4 SAE 80W
 LUKOIL TRANSMISSION TM-4/5 75W-90
 OPET FULLGEAR EP MT 80W
 PLATINUM GEAR GL-4 80W
 PLATINUM GEAR GL-4 80W-90
 PLATINUM GEAR LL 80W-90
 GLOBAL MULTIGEAR TS SAE 75W/90
 PANOLIN SUPER DUTY SYNTH 75W/90
 PANOLIN TOPGEAR 80W/90
 LUBRAX TRM 4 SAE 80W
 LUBRAX TRM 4 SAE 90
 GALP TRANSOIL 80W
 GALP TRANSOIL 80W90
 GALP TRANSVEX TDL 75W90
 TUTELA TRANSMISSION STARGEAR (SAE 80W)
 TUTELA TRANSMISSION STARGEAR AX-ED (SAE 75W-90)
 TUTELA TRANSMISSION STARGEAR HD (SAE 80W)
 UNIGEAR GOLD 75W90
 RORED EPA 80W
 PTT SUPERTRANS 80W
 RAVENOL GETRIEBEÖL MZG SAE 80W-90 GL-4
 REPSOL CARTAGO EPM 80W
 REPSOL CARTAGO EPM 90
 REPSOL CARTAGO FE LD 75W90
 TNK TRANS KP SAE 80W
 SYN GEAR DIFFERENTIAL OIL 75W-90
 SHELL SPIRAX MA 80 W
 SHELL SPIRAX MA 80 W
 SHELL SPIRAX S3 AM 80W-90
 SHELL SPIRAX S3 G 80W

SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
SINOPEC LUBRICANT COMPANY, BEIJING/CN
SINOPEC LUBRICANT COMPANY, BEIJING/CN
SINOPEC LUBRICANT COMPANY, BEIJING/CN
SK LUBRICANTS, SEOUL/KR
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
STATOIL LUBRICANTS, STOCKHOLM/SE
STATOIL LUBRICANTS, STOCKHOLM/SE
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
UNIL OPAL, SAUMUR/FR
UNIL OPAL, SAUMUR/FR
VALVOLINE CUMMINS LIMITED, GURGAON/IN
VEEDOL INTERNATIONAL LIMITED, GLASGOW/GB
YACCO SAS, ST PIERRE LES ELBEUF/FR
YORK LUBRICANTS - GINOUVES SAS, LA GARDE/FR
YPF S.A., BUENOS AIRES/AR
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

SHELL SPIRAX S3 G 80W-90
SINOPEC GREATWALL MTF C-I 80W
SINOPEC GREATWALL MTF C-I 80W/90
SINOPEC GREATWALL MTF C-I 85W/90
SK GEAR EP 80W-90 ZF
SRS GETRIEBEFLUID SML 80W-90
SRS WIOLIN MEHRZWECK-GETRIEBEÖL 80
SRS WIOLIN MEHRZWECK-GETRIEBEÖL 80W-90
SRS WIOLIN MEHRZWECK-GETRIEBEÖL 90
SRS WIOLIN RSG 80
GEARWAY G4 80W
GEARWAY S5 75W-90
ELAN TRANS EP 80W
ELF TRANSELF EP 80W
ELF TRANSELF EP 80W-90
ELF TRANSELF SYNTHESE FE 75W-90
ELF TRANSELF UNIVERSAL FE 80W-90
FINA PONTONIC FDL 75W-90
FINA PONTONIC N 80W-85
TOTAL EP 80W-85
TOTAL EP 80W-90
TOTAL EP 85W-90
TOTAL TRANSMISSION MDL 80W-90
TOTAL TRANSMISSION RS FE 80W-90
TOTAL TRANSMISSION SYN FE 75W-90
GEAR EP 80W
GEAR EP 80W90
VALVOLINE GEAR GARD PLUS 80W90
VEEDOL TRANSMISSION SYNTHETIC LD 75W-90
BVX 1000 75W-90
YORK 896 75W90
HELICOIDAL M (80W)
ZF-ECOFUID X SAE 80W-90

Lubricant class 02E**Manufacturer (02E)**

ARAL AG, BOCHUM/DE
CASTROL LTD, LONDON/GB
CEPSA COMERCIAL PETRÓLEO, MADRID/ES
DAF TRUCKS NV, EINDHOVEN/NL
FUCHS PETROLUB AG, MANNHEIM/DE
HUILES BERLIET S.A., SAINT-PRIEST/FR
PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Trade name (02E)

ARAL GETRIEBEÖL SNS-M 75W-80
CASTROL SYNTRANS Z LONG LIFE 75W-80
MAN SUPER GEAR 341-Z5
DAF XTREME 75W-80
FUCHS TITAN CYTRAC ULTRA SYNTH SAE 75W-80
RTO LONGEVIA BZV ECO 75W-80
TUTELA TRANSMISSION XT-D 540 (SAE 75W-80)
TOTAL TRANSMISSION XS FE 75W-80
ZF-ECOFUID M SAE 75W-80

Lubricant class 02F**Manufacturer (02F)**

GRUPA LOTOS S.A., GDANSK/PL

INA MAZIVA LTD., ZAGREB/HR

MOL-LUB KFT, ALMASFUZITO/HU

PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA

Trade name (02F)

LOTOS ATF SUPER III G

INA ATF DX IID

MOL ATF SYNT 3H

HEAVY DUTY SYNTHETIC BLEND ATF

Lubricant class 02H**Note:**

1. In moderate climate zones, shift quality is impaired if viscosity grades higher than SAE 80W or SAE 30 are used.
2. Product group **Transmatic/Torque converter lock-up clutches TC 2**: With oil sump temperatures below -15°C, engine oil of viscosity grade SAE 20W (API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/SF/SG/SH/SJ/SL specifications or ACEA categories A/B/E) must be used. If possible, any one of the below-mentioned commercial products in the viscosity class SAE 20W is to be used.
3. Product group **Transmatic/Torque converter lock-up clutches TC 2**: The lubricants marked thus (*) may not be used.

Manufacturer (02H)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ADDINOL LUBE OIL GMBH, LEUNA/DE
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 FUCHS PETROLUB AG, MANNHEIM/DE
 GULF OIL INTERNATIONAL, MUMBAI/IN
 IPIRANGA PRODUTOS DE PETROLEO SA, RIO DE JANEIRO/BR
 PANOLIN AG, MADETSWIL/CH
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY

Trade name (02H)

ADDINOL TURBO DIESEL MD 305 SAE 30
 ADDINOL TURBO DIESEL MD 405 SAE 40 (*)
 URSA TRANS SAE 40 (*)
 FUCHS TITAN UNIVERSAL HD SAE 30 ZF
 GULF SUPER DUTY LE 30
 IPIRANGA ULTRAGEAR 40 (*)
 PANOLIN EXTRA DIESEL 30
 LUBRAX TRM 5 HD SAE 30
 LUBRAX TRM 5 HD SAE 40 (*)
 TUTELA TRANSMISSION ZCS 160 (SAE 80W-90)

Lubricant class 02K

Manufacturer (02K)

DEUTSCHE PENTOSIN WERKE GMBH, WEDEL/DE

Trade name (02K)

PENTOSIN CHF 11S

Lubricant class 02L

Manufacturer (02L)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 CEPESA COMERCIAL PETRÓLEO, MADRID/ES
 CEPESA COMERCIAL PETRÓLEO, MADRID/ES
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/FR
 DAF TRUCKS NV, EINDHOVEN/NL
 DE OLIEBRON BV, ZWIJNDRECHT/NL
 DEEP OIL TRADING COMPANY LLP, LONDON/GB
 DEUTSCHE PENTOSIN WERKE GMBH, WEDEL/DE
 EXXONMOBIL CORPORATION, FAIRFAX, VA/US
 FUCHS PETROLUB AG, MANNHEIM/DE
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HAFSA FRANCE, YVETOT/FR
 IGOL FRANCE, AMIENS/FR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 LIQUI MOLY GMBH, ULM/DE
 LUKOIL LUBRICANTS AUSTRIA GMBH, VIENNA/AT
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 MINERVA-OIL SAS, MEUZAC/FR
 MOL-LUB KFT, ALMASFUZITO/HU
 OLIPES S.L., CAMPO REAL - MADRID/ES
 OMV PETROL OFISI A.S., ISTANBUL/TR
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PAZ LUBRICANTS & CHEMICALS, HAIFA/IL
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROGAL S.A., LISBOA/PT
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 RALOV LUBRICANTES, S.A. DE C.V., SANTIAGO TIANGUISTEN/MX
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 S-OIL CORPORATION, SEOUL/KR
 SASOL OIL, RANDBURG/ZA
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SK LUBRICANTS, SEOUL/KR
 TAMOIL ITALIA SPA, MILANO/IT
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 UNIL OPAL, SAUMUR/FR
 VEEDOL INTERNATIONAL LIMITED, GLASGOW/GB
 YACCO SAS, ST PIERRE LES ELBEUF/FR
 YORK LUBRICANTS - GINOUVES SAS, LA GARDE/FR

Trade name (02L)

ADDINOL GETRIEBEÖL GS 75W-80 SL
 TECTROL SYNTOGear MA 7580
 CEPESA TRANSMISIONES FE+LD 75W-80
 MAN SUPER GEAR 75W-80
 MULTIGEAR MTF 75W-80
 MULTIGEAR MTF 75W-80
 GEAR TDS 75W80
 DAF PREMIUM 75W-80
 TOR MT/LD GEAR OIL 75W80
 DRIVE RW FORCE HS GL-4 75W-80
 PENTOSIN TLD 75W-80
 MOBIL DELVAC XHP TRANSMISSION OIL 75W-80
 FUCHS TITAN CYTRAC MAN SYNTH SAE 75W-80
 GULF SYNGEAR FE 75W-80
 GEARTARDER SAE 75W-80
 TRANS GEAR ZF PLUS 75W80
 Q8 T 60 NTECH SAE 75W-80
 LIQUI MOLY TRUCK GETRIEBEÖL HC GL4 SAE 75W-80
 OMV GEAR OIL LDI SAE 75W-80
 MEGOL PREMIUM GETRIEBEOEL HC GL 4 75W80
 PBH EP 75W-80 LD
 MOL HYKOMOL SYNTRANS 75W80
 MAXIGEAR TS 7400 - SAE 75W-80
 MAXIGEAR S 75W-80
 LUKOIL TRANSMISSION TM-4 75W-80
 GOLDENGear LD PLUS SAE 75W/80
 PAZ TRANS MAX 75W-80
 LUBRAX GOLD XP SAE 75W-80
 GALP TRANSVEX TDL ULTRA 75W80
 TUTELA TRANSMISSION FE-GEAR (SAE 75W-80)
 GEAR OIL MDV SILVER 75W80
 KRÖNEN TRANSMISSION SYNTHETIC OIL 341
 RAVENOL SSG SPEC SYNT LKW GETRIEBEÖL 75W-80
 S-OIL 7 GEAR EP LL
 SYN GEARBOX OIL 75W-80
 SHELL SPIRAX S6 GXME 75W- 80
 SK GEAR EP 75W-80 ZF
 TAMOIL TAMGEAR PLUS SAE 75W-80
 TOTAL TRANSMISSION MS FE 75W-80
 GERION LD 75W80
 VEEDOL GEAR OIL LD 75W-80
 BVX Z 1000 75W-80
 YORK 994