



**Transmissions for off-road equipment
(off-road vehicles, special vehicles, lift truck)**

List of lubricants TE-ML 03

Table of contents

Page

1. Approved lubricant classes	1
2. Oil change intervals	2
3. Application class	2
4. Low temperatures limits	2
5. Explanation of footnotes and comments	2
6. Lubricant classes and approved trade products	3

1. Approved lubricant classes

Product group	Lubricant classes for service fills ⁽¹⁾
WG WG 80, 81, 83, 85, 86 WG 92, 98, 100 WG 120, 121, 150, 151 WG 180, 181, 200, 201 WG 250, 251 WG 65 HN 500 PW 45H ERGOPOWER WG 110	<p style="text-align: center;">03A, 03E, 03G, 03H, 03K</p> <p style="text-align: center;">only at ambient temperatures below - 10°C: 03D, 03F</p> <p style="text-align: center;">Special approvals after consultation with ZF.</p>
ERGOPOWER WG 115, 116, 130, 131, 160, 161, 171, 190, 191, 210, 211, 230, 260, 261, 310, 311 BASICPOWER BP 190, 210, 230	<p style="text-align: center;">03A, 03B, 03C, 03D, 03E, 03G, 03H, 03K</p> <p style="text-align: center;">only at ambient temperatures below - 10°C: 03F</p>
ERGOPOWER L2 EP 320, 370, 420, 470, 520	<p style="text-align: center;">03A, 03B, 03C, 03H, 03K</p>
ERGOPOWER L2 (generation A) EP 320 A, 370 A, 420 A, 470 A, 520 A	<p style="text-align: center;">03H, 03M</p>
WG 90, WG 94	<p style="text-align: center;">03A, 03E, 03G, 03H, 03K</p> <p style="text-align: center;">only at ambient temperatures below - 30°C: 03D, 03F</p>
WG 92 S4	<p style="text-align: center;">03A, 03K</p> <p style="text-align: center;">JOHN DEERE, Waterloo/USA: HY-GARD</p> <p style="text-align: center;">only at ambient temperatures below - 10°C: 03F</p>
cPOWER CP 190, 210, 230, 260, 290, 310, 330	<p style="text-align: center;">03G, 03L</p> <p style="text-align: center;">only at ambient temperatures below - 20°C: 03F</p>
Transfer box TB92-432, TB92C-430, TB92-280 I3, TB92-430 I4	<p style="text-align: center;">03E, 03G, 03H</p>

The list of lubricants TE-ML 03, **edition 01.10.2018** 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
www.zf.com/contact

2. Oil change intervals

Lubricant class	03A, 03B, 03C, 03D, 03E, 03F, 03H, 03K	03G	03L	03M
Application class	Oil change interval			
1	2000 h	2000 h	-	-
2	1500 h	1500 h	-	-
3	-	2000 h	2000 h	-
4	1000 h	-	-	4000 h

3. Application class

Application class	Examples of applications
1	- ERGOPOWER, BASICPOWER, 2WG 94, 3WG 94
2	- WG, 4WG 90/94, 5WG 94, WG 92 S4, Transfer box
3	- cPOWER
4	- ERGOPOWER L2, ERGOPOWER L2 (generation A)

4. Low temperatures limits

Lubricant classes	Oil type / viscosity grades	Use at outside temperatures above		
		WG / WG 92 S4 / Transfer box	ERGOPOWER BASICPOWER WG 90 / WG 94 ERGOPOWER L2	cPOWER
03D, 03M	- ATF	- 30°C	- 40°C	-
03F	- UTTO in accordance with JDM J20D / John Deere Low Viscosity Hy-Gard	- 30°C	- 40°C	- 40°C
03E, 03G, 03H, 03L	- UTTO	- 20°C	- 30°C	- 20°C
03K	- SAE 0W-30, 0W-40	- 30°C	- 40°C	-
03B, 03C, 03K	- SAE 5W-30, 5W-40	- 25°C	- 35°C	-
03A, 03B, 03C, 03K	- SAE 10W, 10W-30, 10W-40	- 20°C	- 30°C	-
03A, 03C, 03K	- SAE 15W-30, 15W-40	- 15°C	- 25°C	-
03A, 03C, 03K	- SAE 20W-20, 20W40	- 10°C	- 20°C	-
03A, 03C, 03K	- SAE 30	- 5°C	- 10°C	-

5. Explanation of footnotes and comments

(1) Refer to the following pages for approved commercial products, oil change intervals and low temperature limits.

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).

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.

6. Lubricant classes and approved trade products

Lubricant class 03A

Engine oil

(API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/SF/SG/SH/SJ/SL or ACEA, categories A, B, E)

Viscosity grades: SAE 20W-20 / 30 / 10W-30 / 10W-40 / 15W-30 / 15W-40 / 20W-40

Base oil API Group 1 / 2 / 3

Note:

All engine oils which satisfy the above specifications may be used. There will be no product listing.

Oils of the API CI-4 Plus, CJ-4, CK-4, SM, or ACEA specification, category E9 (also in combination with the above mentioned specifications) are not permitted for this lubricant class. Oils of these specifications are listed in the 03K lubricant class.

Lubricant class 03B

Engine oil

(API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/SF/SG/SH/SJ/SL or ACEA, categories A, B, E)

Viscosity grades: SAE 10W / 5W-30 / 5W-40

Oils of the API CI-4 Plus, CJ-4, CK-4, SM, or ACEA specification, category E9 (also in combination with the above mentioned specifications) are not permitted for this lubricant class. Oils of these specifications are listed in the 03K lubricant class.

Manufacturer (03B)

FUCHS PETROLUB SE, MANNHEIM/DE
 GS CALTEX CORPORATION, SEOUL/KR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY

Trade name (03B)

FUCHS TITAN UNIVERSAL HD SAE 10W
 DOOSAN DX 10W
 Q8 T 400 SAE 10W
 Q8 T 520 SAE 10W
 URANIA C 10W (SAE 10W)
 AMBRA SUPER 10 (SAE 10W)
 AKCELA ENGINE OIL 10 (SAE 10W)
 ARBOR SUPER 10 (SAE 10W)

ZF approval number

ZF002013
 ZF000619
 ZF000113
 ZF000119
 ZF000480
 ZF000610
 ZF000611
 ZF000612

Lubricant class 03C

Off highway lubricants

Viscosity grades: SAE 5W-30 / 5W-40 / 10W / 10W-30 / 10W-40 / 15W-30 / 15W-40 / 20W-20 / 20W-40 / 30

Manufacturer (03C)

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ARAL AG, BOCHUM/DE
 ARAL AG, BOCHUM/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 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
 CASTROL LTD, LONDON/GB
 CATERPILLAR, INC., MOSSVILLE/US
 CATERPILLAR, INC., MOSSVILLE/US
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE
 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
 EUROL B.V., NJIVERDAL/NL
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FABRIKA MAZIVA FAM AD, KRUŠEVAC/RS
 FABRIKA MAZIVA FAM AD, KRUŠEVAC/RS
 FINKE MINERALÖLWERK GMBH, 27374 VISSSELHÖVEDE/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GS CALTEX CORPORATION, SEOUL/KR
 GS CALTEX CORPORATION, SEOUL/KR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 MOL-LUB KFT, ALMASFUZITO/HU
 MOL-LUB KFT, ALMASFUZITO/HU
 NIS AD, NOVI SAD/RS
 NIS AD, NOVI SAD/RS
 PETROGAL S.A., LISBOA/PT
 PETROGAL S.A., LISBOA/PT
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PHI OIL GMBH, ST. GEORGEN/AT
 PRISTA OIL HOLDING EAD, RUSE/BG
 PRISTA OIL HOLDING EAD, RUSE/BG
 RAFINERIJA NAFTE AD BEOGRAD, BELGRADE/RS
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 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
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 RN-LUBRICANTS, LLC, MOSCOW/RU
 RN-LUBRICANTS, LLC, MOSCOW/RU
 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
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 TEXSA DO BRASIL LTDA, UMUARAMA/PR/BR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 TOTAL LUBRIFIANTS S.A., NANTERRE/FR
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE

Trade name (03C)

ADDINOL FLUID TO-4 SAE 30
 ARAL FLUID TO-4 10W
 ARAL FLUID TO-4 30
 AVISTA SPECIAL GEAR OIL TO-4 SAE 30
 AVISTA SPECIAL GEAR OIL TO-4 SAE 10W
 TECTROL UTTO-TO
 BP AUTRAN 4 10
 BP AUTRAN 4 30
 BP AUTRAN TO 410
 BP AUTRAN TO 430
 GEAR OIL MEGA TO-4 SAE 10W
 GEAR OIL MEGA TO-4 SAE 30
 CASTROL TRANSMAX OFFROAD 30
 CASTROL TFC 410
 CASTROL TRANSMAX OFFROAD 10
 CASTROL TFC 410
 CASTROL TFC 430
 CAT TDTO SAE 10W
 CAT TDTO SAE 30
 CHAMPION U.T.T. OIL 500
 CHAMPION TDTO SAE 10W
 TORQUE FLUID 414
 TORQUE FLUID 434
 DELO TORQFORCE SAE 30
 DELO TORQFORCE SAE10W
 URSA TORQFORCE SAE 30
 URSA TORQFORCE SAE10W
 EUROL POWERSHIFT LSA 10W
 MOBILTRANS HD 10W
 MOBILTRANS HD 30
 TRANSHIDO TO-4 SAE 10W
 TRANSHIDO TO-4 SAE 30
 AVIATICON CTO PREMIUM 10W-30
 FUCHS TITAN UTTO TO-4 SAE 30
 FUCHS TITAN UTTO TO-4 SAE 10W
 G-SPECIAL TO-4 10W
 G-SPECIAL TO-4 30
 KIXX GEARTEC TO-4 10W
 KIXX GEARTEC TO-4 30
 INA TRANSMATIK 30
 INA TRANSMATIK 10W
 Q8 TO-4 FLUID SAE 10W
 Q8 TO-4 FLUID SAE 30
 MOL TRANSFLUID TO-4 SAE 30
 MOL TRANSFLUID TO-4 SAE 10W
 NISOTEC TRANSFLUID TO-4 SAE 30
 NISOTEC TRANSFLUID TO-4 SAE10W
 GALP MULTITRANS 10W
 GALP MULTITRANS 30
 PETRONAS CATOIL 10W (SAE 10W)
 KOMCAT SILVER
 PRISTA TO-4 10W
 PRISTA TO-4 30
 GALAX TRANS TO SAE 10W
 RAVENOL CATOEL TO-4 SAE 10W
 RAVENOL CATOEL TO-4 SAE 30
 REPSOL TRANSMISSIONS TO-4 SAE 10W
 REPSOL TRANSMISSIONS TO-4 SAE 10W
 REPSOL TRANSMISSIONS TO-4 SAE 10W
 REPSOL TRANSMISSIONS TO-4 SAE 30
 ROSNEFT KINETIC CATRAN SAE 10W
 ROSNEFT KINETIC CATRAN SAE 30
 SHELL SPIRAX S4 CX 30
 SHELL SPIRAX S4 CX 10 W
 SHELL SPIRAX S4 CX 30
 SHELL SPIRAX S4 CX 10 W
 SHELL SPIRAX S4 CX 30
 SHELL SPIRAX S6 CXME
 SINOPEC PREMIUM HD 30 TRANSMISSION OIL
 SRS GETRIEBFLUID ZFC
 SRS WIOLIN 410
 SRS WIOLIN 430
 TEXSA TAC-4 30
 TOTAL DYNATRANS AC 10W
 TOTAL DYNATRANS AC 30
 TOTAL DYNATRANS ACX 10W
 TOTAL DYNATRANS ACX 30
 WOLF TDTO SAE 10W
 WOLF TRACTOFLUID 500

ZF approval number

ZF000511
 ZF000148
 ZF000149
 ZF002033
 ZF002034
 ZF002194
 ZF000192
 ZF001000
 ZF001402
 ZF001405
 ZF001739
 ZF001740
 ZF000267
 ZF000298
 ZF000300
 ZF000996
 ZF000999
 ZF000868
 ZF000869
 ZF003584
 ZF003585
 ZF000797
 ZF000798
 ZF001903
 ZF001904
 ZF001905
 ZF001906
 ZF001917
 ZF000034
 ZF000035
 ZF001107
 ZF001108
 ZF002300
 ZF002185
 ZF002186
 ZF000238
 ZF000239
 ZF002237
 ZF002238
 ZF000401
 ZF000403
 ZF002117
 ZF002118
 ZF002244
 ZF002245
 ZF000329
 ZF000330
 ZF002014
 ZF002015
 ZF001426
 ZF001077
 ZF000883
 ZF000884
 ZF002160
 ZF001851
 ZF001852
 ZF003469
 ZF003470
 ZF003471
 ZF003472
 ZF003342
 ZF003343
 ZF000005
 ZF000402
 ZF000969
 ZF000970
 ZF001209
 ZF001790
 ZF001088
 ZF000584
 ZF001931
 ZF001932
 ZF001921
 ZF001820
 ZF001821
 ZF002216
 ZF002217
 ZF003582
 ZF003583

Lubricant class 03D**Automatic Transmission Fluids (ATF)****Manufacturer (03D)**

AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE
 CEPSA COMERCIAL PETRÓLEO S.A.U., MADRID/ES
 CEPSA COMERCIAL PETRÓLEO S.A.U., 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
 COMERCIAL ROSHFRAANS, S.A. DE C.V., MEXICO, D.F./MX
 ENI S.P.A., ROME/IT
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GRUPA LOTOS S.A., GDANSK/PL
 HILL CORPORATION, SHYMKENT/KZ
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 MOL-LUB KFT, ALMASFUZITO/HU
 OY TEBOIL AB, HELSINKI/FI
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PETRO-CANADA LUBRICANTS INC., MISSISSAUGA, ONTARIO/CA
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROL OFISI A.S., ISTANBUL/TR
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A, MADRID/ES
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SPECOL SP. Z O.O., CHORZOW/PL

Trade name (03D)

AVISTA SUPER FLUID TYP P/CN
 AVISTA SUPER FLUID ATF 3000
 PENNASOL SUPER FLUID ATF 3000
 PENNASOL SUPER FLUID TYP P/CN
 MOTOR GOLD FLUIDTEC TYP P/CN
 MOTOR GOLD FLUIDTEC ATF 3000
 CEPSA ATF 3000 S
 CEPSA ATF 2000S
 HAVOLINE ATF MERCON V
 SYNTHETIC AUTOMATIC TRANSMISSION FLUID HEAVY DUTY
 TEXAMATIC 4291
 DELO SYN ATF HD
 HAVOLINE MULTI-VEHICLE ATF
 ATF ALLPOWER MULTIVEHICULOS
 ENI ROTRA ATF II E
 MOBIL ATF 320
 G-BOX ATF DXII
 LOTOS ATF SUPER III G
 FASTROIL ATF 3
 INA ATF SUPER
 INA ATF DX IID
 INA ATF DX IIIB
 LIEBHERR HYDRAULIC-GEAR ATF
 MOL ATF SYNT 3H
 TEBOIL FLUID E
 AUXON II E
 ATF XT III FLUID
 HEAVY DUTY SYNTHETIC BLEND ATF
 LUBRAX ATF HD
 ATF DX-3
 REPSOL MATIC III
 REPSOL MATIC LD ATF
 SHELL SPIRAX S2 ATF AX
 SPIRAX S4 ATF HDX
 SINOPEC GREATWALL ATF HD
 HIPOSPEC ATF IID

ZF approval number

ZF002128
 ZF002129
 ZF002296
 ZF002297
 ZF002311
 ZF002312
 ZF000386
 ZF002040
 ZF000101
 ZF001219
 ZF001574
 ZF001664
 ZF001714
 ZF000385
 ZF000951
 ZF000043
 ZF001955
 ZF000620
 ZF003429
 ZF000248
 ZF000392
 ZF002314
 ZF002119
 ZF001895
 ZF003321
 ZF000048
 ZF001177
 ZF001236
 ZF002120
 ZF001667
 ZF000318
 ZF001751
 ZF000374
 ZF001812
 ZF003348
 ZF003354

Lubricant class 03E**Universal axle and transmission oil****Manufacturer (03E)**

ADDINOL LUBE OIL GMBH, LEUNA/DE
 ARAL AG, BOCHUM/DE
 AVIA AG, MÜNCHEN/DE
 BAYWA AG MÜNCHEN, MÜNCHEN/DE
 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
 CATERPILLAR, INC., MOSSVILLE/US
 CEPESA COMERCIAL PETRÓLEO S.A.U., MADRID/ES
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CHEVRON LUBRICANTS, SAN RAMON, CA/US
 CLASS KGAA MBH, HARSEWINKEL/DE
 DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE
 EUROL B.V., NJIVERDAL/NL
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 EXXONMOBIL CORPORATION, HOUSTON, TX/US
 FUCHS PETROLUB SE, MANNHEIM/DE
 FUCHS PETROLUB SE, MANNHEIM/DE
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GAZPROMNEFT-LUBRICANTS, MOSCOW/RU
 GB LUBRICANTS, GATESHEAD/GB
 GS CALTEX CORPORATION, SEOUL/KR
 GULF OIL INTERNATIONAL, MUMBAI/IN
 GULF OIL INTERNATIONAL, MUMBAI/IN
 HYUNDAI OILBANK CO., LTD., SEOUL/KR
 INA MAZIVA LTD., ZAGREB/HR
 INA MAZIVA LTD., ZAGREB/HR
 JCB INDIA, BALLABGARH/IN
 JOHN DEERE, MOLINE, ILLINOIS/US
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
 LIQUI MOLY GMBH, ULM/DE
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE
 OBNINSKORGSINTEZ, OBNINSK/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 OOO "LLK-INTERNATIONAL", MOSCOW/RU
 PAKELO MOTOR OIL, SAN BONIFACIO (VR)/IT
 PANOLIN AG, MADETSWIL/CH
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR
 PETROGAL S.A., LISBOA/PT
 PETROL OFISI A.S., ISTANBUL/TR
 PETROMIN CORPORATION, JEDDAH/SA
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY
 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
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/DE
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SAME DEUTZ FAHR, TREVIGLIO/IT
 SASOL OIL, RANDBURG/ZA
 SASOL OIL, RANDBURG/ZA
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN
 SEANON PETROCHEMICAL CO., LTD., LIUZHOU, GUANGXI/CN
 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
 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
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE
 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
 VALVOLINE CUMMINS PVT LIMITED, GURGAON/IN
 VALVOLINE EUROPE, DORDRECHT/NL

Trade name (03E)

ADDINOL UTTO SAE 10W-30
 ARAL FLUID HGS
 AVIA HYDROFLUID TD
 TECTROL UTTO-HF
 BP VANELLUS AGRISUPER TRANSMISSION 80W
 BP TRACTRAN TF-10
 BP VANELLUS AGRISUPER TRANSMISSION 80W
 FARMER POLY 304
 MOTOREX UTTO CF
 CASTROL AGRISUPER PLUS 80W
 CASTROL AGRISUPER PLUS 10W-30
 CASTROL TRANSMAX AGRISUPER PLUS 80W
 CAT MULTIPURPOSE TRACTOR OIL
 CEPESA AURIGA TE 55 10W-30
 CHEVRON 1000 THF
 TEXTRAN TDH PREMIUM
 CLAAS AGRISHIFT GA 12
 AVENO UTTO
 EUROL HYKROL JD 68
 MOBILFLUID 424
 MOBILFLUID 426
 FUCHS TITAN AGRIFARM UTTO MP
 FUCHS TITAN AGRIFARM UTTO MP
 G-SPECIAL UTTO 10W-30
 G-SPECIAL UTTO PREMIUM 10W-30
 GB UNITRANS(R) ZF
 DOOSAN AXLE OIL STANDARD
 GULF MPTF 10W-30
 GULF MPTF 10W-30
 XTEER THF 75W-80
 INA TRANSHIDROL JD 50
 INA TRANSHIDROL JD 50
 JCB REAR AXLE OIL
 JOHN DEERE HY-GARD
 Q8 T 2000
 Q8 T 2200
 LIEBHERR GEAR MF 80W
 LIQUI MOLY SPECIAL UTTO
 MEGOL TRAKTORENOEL UTTO PREMIUM SAE 10W-30
 RW DRIVE FORCE UTTO SAE 10W-30
 LUKOIL VERSO PLUS
 LUKOIL VERSO LVX
 UTTO FLUID 4 D SAE 10W/30
 PANOLIN JD 303
 LUBRAX UNITRACTOR SAE 10W-30
 GALP TRALUB 807 S
 MAXITRAK TMS OIL 500
 PETROMIN MP TRACTOR 10W30
 AMBRA MULTI G (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 ARBOR MTF (SAE 10W-30)
 AKCELA NEXPLORE (SAE 10W-30)
 AKCELA NEXPLORE (SAE 10W-30)
 AMBRA MULTI G (SAE 10W-30)
 AKCELA NEXPLORE (SAE 10W-30)
 ARBOR MTF (SAE 10W-30)
 GEAR OIL UTTO SILVER 10W-30
 RAVENOL GETRIEBEOEL UTTO
 ROLF UTTO SAE 10W-30
 SDF UTTO
 DF UTTO
 UNIVERSAL TRANSMISSION OIL 68
 SASOL UNIVERSAL TRANSMISSION OIL RS 68
 SAVSOL 315 HAT
 SEANON DEDICATED TRANSMISSION OIL 10W-30
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S6 TXME
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SHELL SPIRAX S4 TXM
 SINOPEC GREATWALL UTTO
 SRS HYDROFLUID N
 TOTAL DYNATRANS MPV
 ELF TRACTELF BF 16
 TOTAL DYNATRANS MPWB
 TOTAL DYNATRANS MPX
 VALVOLINE UTF PREMIUM
 UNITRAC 80W

ZF approval number

ZF000509
 ZF000457
 ZF001811
 ZF002193
 ZF000210
 ZF000897
 ZF002161
 ZF000590
 ZF001158
 ZF000759
 ZF000950
 ZF002188
 ZF000834
 ZF001200
 ZF000100
 ZF000820
 ZF001289
 ZF001687
 ZF001971
 ZF000040
 ZF000061
 ZF002183
 ZF002184
 ZF002211
 ZF003446
 ZF000870
 ZF001995
 ZF000921
 ZF000922
 ZF002219
 ZF000400
 ZF000613
 ZF001502
 ZF001223
 ZF000177
 ZF002042
 ZF001856
 ZF001368
 ZF001344
 ZF003350
 ZF002295
 ZF002303
 ZF001276
 ZF000414
 ZF001366
 ZF000849
 ZF001351
 ZF002009
 ZF000544
 ZF000545
 ZF000551
 ZF001409
 ZF001461
 ZF001634
 ZF001838
 ZF002075
 ZF002092
 ZF002093
 ZF000958
 ZF001718
 ZF003375
 ZF002229
 ZF002230
 ZF000707
 ZF001828
 ZF001131
 ZF001959
 ZF000357
 ZF000358
 ZF000359
 ZF001295
 ZF001613
 ZF003325
 ZF000105
 ZF000827
 ZF000540
 ZF001317
 ZF001539
 ZF002222
 ZF002218
 ZF002041

Lubricant class 03F

Universal axle and transmission oil in accordance with JDM J20D
use at outside temperatures below -10°C

Manufacturer (03F)

JOHN DEERE, MOLINE, ILLINOIS/US
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

Trade name (03F)

JOHN DEERE LOW VISCOSITY HY-GARD
SHELL SPIRAX S3 TLV
SHELL SPIRAX S3 TLV
SHELL SPIRAX S3 TLV
SHELL SPIRAX S3 TLV

ZF approval number

ZF001498
ZF000364
ZF000365
ZF001709
ZF001848

Lubricant class 03G

Premium universal axle and transmission oil

Manufacturer (03G)

SINOPEC LUBRICANT CO., LTD., BEIJING/CN
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

Trade name (03G)

SINOPEC GREATWALL HD DRIVE AXLE OIL
ZF-POWERFLUID PLUS
ZF-POWERFLUID C-PLUS

ZF approval number

ZF002162
ZF001021
ZF002087

Lubricant class 03H

Biodegradable lubricants

Environmental label RAL-UZ 79 (Blauer Engel), VAMIL-regeling

Viscosity grade: SAE 75W-80, 10W-30

Instructions on the use of biodegradable lubricants:

The oil manufacturer's change-over directives included in the product description are to be observed when change-over to biodegradable lubricants is effected.

Manufacturer (03H)

PANOLIN AG, MADETSWIL/CH

Trade name (03H)

PANOLIN BIOFLUID ZFH 10W/30

ZF approval number

ZF000391

Lubricant class 03K

Engine oil

(API CI-4 Plus/CJ-4/CK-4/SM or ACEA, category E9)

Viscosity grades: SAE 0W-30 / 0W-40 / 5W-30 / 5W-40 / 10W / 20W-20 / 30 / 10W-30 / 10W-40 / 15W-30 / 15W-40 / 20W-40

Manufacturer (03K)

CHEVRON LUBRICANTS, SAN RAMON, CA/US
CHEVRON LUBRICANTS, SAN RAMON, CA/US
JOHN DEERE, MOLINE, ILLINOIS/US
JOHN DEERE, MOLINE, ILLINOIS/US
JOHN DEERE, MOLINE, ILLINOIS/US

Trade name (03K)

URSA ULTRA LE 10W-30
DELO 400 XLE SAE 10W-30
JOHN DEERE PLUS 50 II 15W-40
JOHN DEERE PLUS 50 II 10W-30
JOHN DEERE PLUS 50 II 0W-40

ZF approval number

ZF001550
ZF002272
ZF001395
ZF001486
ZF001487

Lubricant class 03L

Universal axle and transmission oil

Manufacturer (03L)

CHEVRON LUBRICANTS, SAN RAMON, CA/US
CLASS KGAA MBH, HARSEWINKEL/DE
GS CALTEX CORPORATION, SEOUL/KR
JOHN DEERE, MOLINE, ILLINOIS/US
LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE
SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR
TOTAL LUBRIFIANTS S.A., NANTERRE/FR

Trade name (03L)

TEXTRAN TDH PREMIUM
CLAAS AGRISHIFT GA 12
DOOSAN AXLE OIL STANDARD
JOHN DEERE HY-GARD
LIEBHERR GEAR MF 80W
SHELL SPIRAX S6 TXME
TOTAL DYNATRANS MPV
ELF TRACTELF BF 16
TOTAL DYNATRANS MPWB

ZF approval number

ZF000820
ZF001289
ZF001995
ZF001223
ZF001856
ZF001295
ZF000540
ZF001317
ZF001539

Lubricant class 03M

Automatic Transmission Fluids (ATF)

Manufacturer (03M)

BASF SE, LUDWIGSHAFEN/DE
CASTROL LTD, LONDON/GB
CASTROL LTD, LONDON/GB
EXXONMOBIL CORPORATION, HOUSTON, TX/US
EXXONMOBIL CORPORATION, HOUSTON, TX/US

Trade name (03M)

EMGARD 2805
CASTROL TRANSYND
TES-295 SYN TRANSMISSION FLUID
MOBIL DELVAC SYNTHETIC ATF
MOBIL DELVAC 1 ATF

ZF approval number

ZF003370
ZF000226
ZF002298
ZF001234
ZF001827