



**Tractor axles, transmissions for harvesters and final drives**

**List of lubricants TE-ML 21**

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**1. Approved lubricant classes**

<b>Product groups</b>	<b>Lubricant classes <sup>(1)</sup></b>	
	<b>First fill <sup>(2)</sup></b>	<b>Service fills <sup>(3)</sup></b>
<b>Axles</b> APL-300, APL-700 AS-2000, AS-3000	<a href="#">ZF PowerFluid Gear LS</a> 21C / 21N	<a href="#">ZF PowerFluid Gear LS</a> <a href="#">ZF PowerFluid Plus</a> 21C / 21E / 21F / 21G / 21N
TerraSteerAxle (TSA), TerraDriveAxle (TDA)	<a href="#">ZF PowerFluid Gear LS</a> <a href="#">ZF PowerFluid Plus</a> 21C / 21E / 21F / 21G / 21N	<a href="#">ZF PowerFluid Gear LS</a> <a href="#">ZF PowerFluid Plus</a> 21C / 21E / 21F / 21G / 21N
<b>Transmissions for harvesters</b> 2MD40 3MD30, 3MD35, 3MD40	21A	21A
<b>ZF-half-shafts</b> (planetary final drives) for tractor transmissions Ecom, Terramatic, Terrapower, T-7000 and S-Matic	<a href="#">ZF PowerFluid Gear LS</a> <a href="#">ZF PowerFluid Plus</a> 21A / 21C / 21G / 21N	<a href="#">ZF PowerFluid Gear LS</a> <a href="#">ZF PowerFluid Plus</a> 21A / 21C / 21G / 21N
<b>Final drives for harvesters</b> S-800, S-950, S-1050, S-1250	21A	21A

The list of lubricants TE-ML 21, **edition 10.10.2024** 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](http://www.aftermarket.zf.com/lubricants).

**ZF Friedrichshafen AG**  
D-88038 Friedrichshafen  
[www.zf.com/contact](http://www.zf.com/contact)

## 2. Oil change intervals








### 2.1 Initial oil change interval

Lubricant classes	21A	<a href="#">ZF PowerFluid Gear LS</a> 21C / 21F / 21N	<a href="#">ZF PowerFluid Plus</a> 21E / 21G
<b>Product groups</b>	<b>Initial oil change interval</b>		
<b>Axles APL, AS, TSA, TDA</b>	-	1500 h <sup>(4)</sup>	1500 h <sup>(4)</sup>
<b>Transmissions for harvesters</b>	500 h	-	-
<b>ZF-half-shafts</b>	500 h	500 h <sup>(4)</sup>	500 h <sup>(4)</sup>
<b>Final drives for harvesters</b>	500 h	-	-

### 2.2 Subsequent oil change interval

Lubricant classes	21A	<a href="#">ZF PowerFluid Gear LS</a> 21C / 21F / 21N	<a href="#">ZF PowerFluid Plus</a> 21E / 21G
<b>Product groups</b>	<b>Subsequent oil change interval</b>		
<b>Axles APL, AS, TSA, TDA</b>	-	1500 h	3000 h
<b>Transmissions for harvesters</b>	1000 h	-	-
<b>ZF-half-shafts</b>	1000 h	1000 h	1000 h
<b>Final drives for harvesters</b>	1000 h	-	-

## 3. Hydraulic fluids

Product group	Lubricant classes for service fills <sup>(1)</sup>	Use at outside temperatures above
Brake hydraulics, hydraulic differential lock (DHL) and steering	21L	- 40°C 
	lubricants in accordance with JDM J20D	- 40°C 
	21E / 21F (only lubricants in accordance with JDM J20C), 21G	- 30°C 
	21K	- 30°C 
	21M (ISO VG 32)	- 40°C  + 20°C
	21M (ISO VG 46)	- 10°C 
	21M (ISO VG 68)	- 5°C 

## 4. Greasing points

Product groups	Lubricating grease
All	Lithium saponified multipurpose grease of NLGI class 2 which is mixable with mineral oil (grease code KP2K-30 in acc. with DIN 51825 or ISO-L-XCCHB2 in accordance with ISO 6743-9). Lubricating interval acc. to corresponding lubricating and maintenance specifications.

## 5. Explanation of footnotes and comments

### Footnotes

- (1) **Refer to the following pages for approved commercial products.**
- (2) First filling: The lubricant classes listed are compulsory for initial fillings of transmissions as well as fillings during transmission break-in (under 1,000h).
- (3) Service filling: The lubricant classes listed are compulsory for service oil changes according to the oil-change intervals mentioned under Section 2.2.
- (4) The original ZF factory fill is to remain in the axle for at least the first 500 operating hours; it is not recommended to change the oil earlier.

### Comments

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.









**Lubricant class 21C**

Transmission oil with limited-slip additives

Viscosity grades: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 85W-90 / 90

**Manufacturer (21C)**

ADDINOL LUBE OIL GMBH, LEUNA/DE  
 ADDINOL LUBE OIL GMBH, LEUNA/DE  
 AGCO GMBH, MARKTOBERDORF/DE  
 AGCO GMBH, MARKTOBERDORF/DE  
 AVIA AG, MÜNCHEN/DE  
 AVISTA OIL DEUTSCHLAND GMBH, UETZE/DE  
 BAYWA AG MÜNCHEN, MÜNCHEN/DE  
 BELGIN MADENI YAGLAR TIC. VE SAN. A.S., KOCAELI/TR  
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
 CASTROL LTD, LONDON/GB  
 CASTROL LTD, LONDON/GB  
 CEPESA COMERCIAL PETRÓLEO S.A.U., MADRID/ES  
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE  
 CHEVRON LUBRICANTS, SAN RAMON, CA/US  
 CHEVRON LUBRICANTS, SAN RAMON, CA/US  
 CHEVRON LUBRICANTS, SAN RAMON, CA/US  
 CLASS KGAA MBH, HARSEWINKEL/DE  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 FINKE MINERALÖLWERK GMBH, 27374 VISSLHÖVEDE/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 GEORG OEST MINERALÖLWERK GMBH & CO.KG, FREUDENSTADT/DE  
 GS CALTEX CORPORATION, SEOUL/KR  
 GULF OIL INTERNATIONAL, MUMBAI/IN  
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN  
 HITACHI CONSTRUCTION MACHINERY EUROPE NV, AMSTERDAM/NL  
 HUILES BERLIET S.A., SAINT-PIERRE/FR  
 INA MAZIVA LTD., ZAGREB/HR  
 JOHN DEERE, MOLINE, ILLINOIS/US  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
 LIQUI MOLY GMBH, ULM/DE  
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
 MOL-LUB KFT, ALMASFUZITO/HU  
 MORRIS LUBRICANTS, SHREWSBURY/GB  
 MOTOREX AG, LANGENTHAL/CH  
 MOTOREX AG, LANGENTHAL/CH  
 NILS SPA, BURGSTALL/IT  
 NORTHLAND PRODUCTS COMPANY, WATERLOO, IOWA/US  
 OILFINO MINERALÖL GMBH, PRISDORF/DE  
 ORLEN OIL SP. Z O.O., KRAKOW/PL  
 ORLEN OIL SP. Z O.O., KRAKOW/PL  
 ORLEN OIL SP. Z O.O., KRAKOW/PL  
 ORLEN S.A., GDANSK/PL  
 OY TEBOIL AB, HELSINKI/FI  
 PAKELO MOTOR OIL S.P.A. A.S.U., SAN BONIFACIO (VR)/IT  
 PETROGAL S.A., LISBOA/PT  
 PETROL OFISI A.S., ISTANBUL/TR  
 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  
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A. MADRID/ES  
 REPSOL LUBRICANTES Y ESPECIALIDADES, S.A. MADRID/ES  
 ROLF LUBRICANTS GMBH, LEVERKUSEN/DE  
 SASOL ENERGY, JOHANNESBURG/ZA  
 SAVITA OIL TECHNOLOGIES LIMITED, MUMBAI/IN  
 SENNEBOGEN MASCHINENFABRIK GMBH, STEINACH/DE  
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB  
 SHELL INTERNATIONAL PETROLEUM COMP. LTD, LONDON/GB  
 SINOPEC LUBRICANT CO., LTD., BEIJING/CN  
 SK ENMOVE CO.,LTD., SEOUL/KR  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
 TALENERGIES LUBRIFIANTS, NANTERRE/FR  
 TALENERGIES LUBRIFIANTS, NANTERRE/FR  
 TALENERGIES LUBRIFIANTS, NANTERRE/FR  
 TALENERGIES LUBRIFIANTS, NANTERRE/FR  
 UNIL OPAL, SAUMUR/FR  
 VALVOLINE EUROPE, DORDRECHT/NL  
 VALVOLINE EUROPE, DORDRECHT/NL  
 WILHELM HOYER B.V. & CO. KG, VISSLHÖVEDE/DE  
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE  
 ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE

**Trade name (21C)**

ADDINOL GETRIEBEÖL GH 85W-90 LS  
 ADDINOL GETRIEBEÖL GH 80W-90 LS  
 VALTRA AXLE LS 85W-90  
 FENDT SUPER TRANS LS 85W-90  
 AVIA HYPOID 90 LS  
 AVISTA PEER EVO GL5 LS SAE 90  
 TECTROL MULTIGEAR LS 90  
 BELGEAR LS 85W90  
 EVOLCA BGX 85W90  
 CASTROL TRANSMAX LIMITED SLIP LL 75W-140  
 CASTROL TRANSMAX LIMITED SLIP Z 85W-90  
 CEPESA AURIGA LS PLUS 80W-90  
 CHAMPION OEM SPECIFIC 80W90 LS GL 5  
 GEAR OIL ZF SAE 80W-90  
 GEARTEX LS 80W-90  
 GEARTEX LS 85W-90  
 CLAAS AGRISHIFT BLS 90  
 MOBILUBE LS 85W-90  
 MOBILUBE LS 85W-90  
 AVIATICON HYPOID LS 90  
 FUCHS TITAN GEAR LS SAE 90  
 OEST GETRIEBEÖL HYPOID LS 90  
 DOOSAN LS GEAR OIL 80W90  
 GULF GEAR LS 90  
 HP GEAR OIL ZFL 80W 90 LS  
 HITACHI GENUINE AXLE OIL ZX-W LS 80W-90  
 EP 90 GL  
 INA HIPENOL GTL LS 90  
 JOHN DEERE GL-5 GEAR LUBRICANT W/LS ADD 80W-90  
 Q8 T 45 LS SAE 90  
 LIEBHERR GEAR BASIC 90 LS  
 LIQUI MOLY HYPOID-GETRIEBEÖL PLUS GL 5 LS 85W-90  
 MEGOL HYPOID-GETRIEBEÖL AXLE LS SAE 85W-90  
 MOL HYKOMOL LS 85W90  
 TERRAIN LS 80W-90  
 MOTOREX YORK LS UNIVERSAL SAE 90  
 YORK 699 LS SAE 90  
 ALGOL HYPOID LS 90  
 POSI-GRIP JDZF 80W90  
 OILFINO VARIUS G 400LS 85W-90  
 PLATINUM GEAR LS 80W-90  
 PLATINUM AGRO LS 80W-90  
 ORLEN OIL GEAR LS 80W-90  
 LOTOS TITANIS LS GL-5 80W-90  
 TEBOIL HYPOID LS 80W-90  
 UNIVERSAL GEAR EP LS SAE 85W90  
 GALP TRANSOIL HP LS 90  
 MAXIGEAR EP-X 85W-90LS  
 AMBRA AXF 80W-90 (SAE 80W-90)  
 AKCELA AXLEPOWER (SAE 80W-90)  
 TUTELA TRANSMISSION W90/LS (SAE 80W-90)  
 ARBOR TTF (SAE 80W-90)  
 PETRONAS AXLE 300 LS 80W-90  
 SUPERGEAR BRONZE 85W90 LS  
 REPSOL CARTAGO EP AUTOBLOCANTE SAE 80W90  
 REPSOL NAVIGATOR LSD 80W-90  
 ROLF TRANSMISSION M5 A-LS 80W-90  
 SASOL DIFFERENTIAL OIL LIMITED SLIP 80W-90  
 SAVSOL AUTOGEAR 90 LIMITED SLIP GL-5  
 SENLUBE GEAR HYPOID LS  
 SHELL SPIRAX S3 ALS 80W-90  
 SHELL SPIRAX S3 ALS 85W-90  
 SINOPEC GREATWALL ZLS GL-5 85W/90  
 SK ZIC G-5 LSD 80W-90  
 SRS WIOLIN RSH  
 ELF TRACTELF BLS 80W-90  
 DYNATRANS DA 80W-90  
 DYNATRANS LS 80W-90  
 CLASS AGRISHIFT BLS 80W-90  
 GEAR AB-EP 85W90  
 VALVOLINE HEAVY DUTY AXLE OIL PRO 80W-90 LS  
 NESTE AXLE LS 80W-90  
 HOYER GEAR M-LS 90  
 WOLF OFFICIALTECH 80W90 LS GL 5  
 ZF POWERFLUID GEAR LS

**ZF approval number**

ZF000629  
 ZF000703  
 ZF003466  
 ZF003467  
 ZF003689  
 ZF004776  
 ZF001167  
 ZF002257  
 ZF004736  
 ZF002141  
 ZF002178  
 ZF001050  
 ZF003555  
 ZF000787  
 ZF000809  
 ZF000810  
 ZF001287  
 ZF000031  
 ZF011090  
 ZF002301  
 ZF000651  
 ZF001479  
 ZF001341  
 ZF000891  
 ZF001578  
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 ZF003447  
 ZF000049  
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 ZF000027  
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 ZF008276  
 ZF003625  
 ZF000700  
 ZF001898  
 ZF008345  
 ZF001303  
 ZF004813  
 ZF000127  
 ZF003340  
 ZF000442  
 ZF006120  
 ZF006121  
 ZF006122  
 ZF008173  
 ZF000526  
 ZF001996  
 ZF004847  
 ZF011994  
 ZF003552  
 ZF008414



**Lubricant class 21E**

Universal axle and transmission oil

**Manufacturer (21E)**

CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US  
VIBRA ENERGIA S.A., DUQUE DE CAXIAS/BR

**Trade name (21E)**

PREMIUM TRANSAXLE OIL 80W-140  
LUBRAX UNITRACTOR 10W-30

**ZF approval number**

ZF005941  
ZF010660

**Lubricant class 21F**

## Universal axle and transmission oil

**Manufacturer (21F)**

ADDINOL LUBE OIL GMBH, LEUNA/DE  
 ADDINOL LUBE OIL GMBH, LEUNA/DE  
 AGCO GMBH, MARKTOBERDORF/DE  
 ARGO TRACTORS S.P.A., FABBRICO RE/IT  
 ARGO TRACTORS S.P.A., FABBRICO RE/IT  
 ARGO TRACTORS S.P.A., FABBRICO RE/IT  
 AVIA AG, MÜNCHEN/DE  
 AVIA AG, MÜNCHEN/DE  
 BAYWA AG MÜNCHEN, MÜNCHEN/DE  
 BAYWA AG MÜNCHEN, MÜNCHEN/DE  
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
 BP PLC., LONDON/GB  
 CASTROL LTD, LONDON/GB  
 CASTROL LTD, LONDON/GB  
 CASTROL LTD, LONDON/GB  
 CASTROL LTD, LONDON/GB  
 CATERPILLAR, INC., MOSSVILLE/US  
 CEPESA COMERCIAL PETRÓLEO S.A.U., MADRID/ES  
 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  
 CLASS KGAA MBH, HARSEWINKEL/DE  
 CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US  
 CNH INDUSTRIAL AMERICA LLC, RACINE, WI/US  
 DEUTSCHE ÖLWERKE LUBMIN, LUBMIN/DE  
 EUROL B.V., NJIVERDAL/NL  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
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 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 FINKE MINERALÖLWERK GMBH, 27374 VISELHÖVEDE/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 GB LUBRICANTS, GATESHEAD/GB  
 GS CALTEX CORPORATION, SEOUL/KR  
 GULF OIL INTERNATIONAL, MUMBAI/IN  
 GULF OIL INTERNATIONAL, MUMBAI/IN  
 HINDUSTAN PETROLEUM CORPORATION LTD., MUMBAI/IN  
 HUILES BERLIET S.A., SAINT-PRIEST/FR  
 HYUNDAI OILBANK CO., LTD., SEOUL/KR  
 INA MAZIVA LTD., ZAGREB/HR  
 INA MAZIVA LTD., ZAGREB/HR  
 INA MAZIVA LTD., ZAGREB/HR  
 JOHN DEERE, MOLINE, ILLINOIS/US  
 KROON-OIL B.V., ALMELO/NL  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 KUWAIT PETROLEUM INTERNATIONAL LUBRICANT, ANTWERP/NL  
 LAEMMLE CHEMICALS AG, MADETSWIL/CH  
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
 LIEBHERR HYDRAULIKBAGGER GMBH, KIRCHDORF/DE  
 LIQUI MOLY GMBH, ULM/DE  
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
 MEGUIN GMBH & CO. KG, SAARLOUIS/DE  
 MOTOREX AG, LANGENTHAL/CH  
 MOTOREX AG, LANGENTHAL/CH  
 MOTOREX AG, LANGENTHAL/CH  
 OPET FUCHS MADENI YAG. SAN. VE TIC. A.S., IZMIR/TR  
 PAKEL MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT  
 PETROGAL S.A., LISBOA/PT  
 PETROL OFISI A.S., ISTANBUL/TR  
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
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 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY  
 PETRONAS LUBRICANTS INTERNATIONAL SDN BH, KUALA LUMPUR/MY

**Trade name (21F)**

ADDINOL UTTO SAE 10W-30  
 ADDINOL UTTO EXTRA (SAE 20W-40)  
 VALTRA TRANSMISSION XT60  
 VELA C+ AGROLUBE  
 VELA C+ LANDINI  
 VELA C+ MCCORMICK  
 AVIA HYDROFLUID TD  
 AVIA HYDROFLUID DLZ  
 TECTROL UTTO-ZF  
 TECTROL UTTO-HF  
 EVOLCA UTTO 8068  
 BP TRACTRAN TF-10  
 CASTROL AGRI TRANS PLUS 80W  
 CASTROL TRANSMAX AGRI TRANS PLUS 80W  
 CASTROL AGRI TRANS PLUS 80W  
 CASTROL TRANSMAX AGRI TRANS PLUS 80W  
 CAT MULTIPURPOSE TRACTOR OIL  
 CEPESA AURIGA TE 55 10W-30  
 CHAMPION U.T.T. OIL 170 BM  
 1000 THF  
 1000 THF  
 1000 THF  
 1000 THF  
 1000 THF  
 1000 THF  
 1000 THF  
 1000 THF  
 CLAAS AGRISHIFT GA 12  
 PREMIUM TRANSAXLE OIL 20W-40  
 PREMIUM TRANSAXLE OIL 20W-40  
 AVENO UTTO  
 EUROL HYKROL JD 68  
 MOBILFLUID 424  
 MOBILFLUID 424  
 MOBIL HYDRAUL 56  
 MOBILFLUID 424  
 MOBILFLUID 428  
 MOBILFLUID 428  
 MOBILFLUID 428  
 MOBILFLUID 428  
 MOBILFLUID 424  
 AVIATICON AGRA PREMIUM UTTO  
 FUCHS TITAN UTTO ZF (SAE 20W-40)  
 FUCHS TITAN AGRIFARM UTTO MP  
 FUCHS TITAN AGRIFARM UTTO MP  
 TITAN UTTO WB  
 GB UNITRANS(R) ZF  
 DOOSAN AXLE OIL STANDARD  
 GULF MPTF 10W-30  
 GULF MPTF 10W-30  
 HP SUPERTRAN FM  
 EPMF  
 XTEER THF 75W-80  
 INA TRANSHIDROL JD 50  
 INA TRANSHIDROL ZF 20W-40  
 INA TRANSHIDROL JD 50  
 JOHN DEERE HY-GARD  
 AGRIFLUID HT-PLUS  
 Q8 T 2000  
 JCB HP GEAR OIL PLUS  
 JCB HP GEAR OIL PLUS  
 JCB HP GEAR OIL PLUS  
 Q8 T 2200  
 ROXOR CONSTAR UTTO 803  
 LIEBHERR GEAR MF 80W  
 LIEBHERR GEAR PLUS 20W-40  
 LIEBHERR GEAR PLUS 20W-40  
 LIEBHERR GEAR MF 80W  
 LIQUI MOLY SPECIAL UTTO  
 MEGOL TRAKTORENOEL UTTO PREMIUM SAE 10W-30  
 MEGOL TRAKTORENOEL UTTO  
 MOTOREX YORK FARMER POLY 304  
 MOTOREX YORK UTTO CF SAE 10W30  
 MOTOREX YORK FARMER POLY 604  
 OPET FULLGEAR FD 80W-140  
 UTTO FLUID 4 D SAE 10W-30  
 GALP TRALUB 807 S  
 MAXITRAK TMS OIL 500  
 AMBRA MULTI G (SAE 10W-30)  
 AMBRA MULTI G (SAE 10W-30)  
 AMBRA MULTI G (SAE 10W-30)  
 AKCELA TRANSAXLE FLUID 80W-140 (SAE 80W-140)  
 AKCELA TRANSAXLE FLUID 20W-40  
 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)

**ZF approval number**

ZF000509  
 ZF001845  
 ZF003465  
 ZF003719  
 ZF003717  
 ZF003718  
 ZF001811  
 ZF005975  
 ZF001161  
 ZF002193  
 ZF004739  
 ZF000897  
 ZF000759  
 ZF002188  
 ZF004800  
 ZF004801  
 ZF000834  
 ZF001200  
 ZF011908  
 ZF011782  
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 ZF001289  
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 ZF000040  
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 ZF003675  
 ZF004764  
 ZF005939  
 ZF008221  
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 ZF011883  
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 ZF000661  
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 ZF002184  
 ZF004829  
 ZF000870  
 ZF001995  
 ZF000921  
 ZF000922  
 ZF003566  
 ZF008266  
 ZF002219  
 ZF000400  
 ZF000433  
 ZF000613  
 ZF001223  
 ZF008247  
 ZF000177  
 ZF001636  
 ZF002096  
 ZF003538  
 ZF003694  
 ZF009445  
 ZF001856  
 ZF004845  
 ZF006093  
 ZF004844  
 ZF001368  
 ZF001344  
 ZF011906  
 ZF008198  
 ZF008241  
 ZF006009  
 ZF001866  
 ZF004769  
 ZF000849  
 ZF001351  
 ZF000544  
 ZF000545  
 ZF000551  
 ZF000944  
 ZF001184  
 ZF001409  
 ZF001461  
 ZF001634  
 ZF001838  
 ZF002075  
 ZF002092



**Lubricant class 21G**

Premium universal axle and transmission oil

**Manufacturer (21G)**

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

**Trade name (21G)**

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

**ZF approval number**

ZF002162  
ZF002087  
ZF005995

**Lubricant class 21K**

Engine oil

Viscosity grades: SAE 10W, 10W-30, 10W-40

in accordance with Specification

API CD/CE/CF-4/CF/CG-4/CH-4/CI-4/CI-4 Plus/CJ-4

or SF/SG/SH/SJ/SL/SM

or ACEA, categories A, B, E

**Note:**

All trade products which satisfy the above specifications may be used. There will be no product listing.

**Lubricant class 21L**

Automatic Transmission Fluid (ATF) based on mineral base fluids according to former Dexron IID, IIIF, IIIG or IIIH specification by General Motors.

**Note:**

All trade products which satisfy the above specifications may be used. There will be no product listing.

**Lubricant class 21M**

Mineral oil-based hydraulic oil HLP in accordance with DIN 51524-2 or mineral oil-based hydraulic oil HVLP in accordance with DIN 51524-3.

Viscosity grades: ISO VG 32 / 46 / 68

**Note:**

All mineral oil-based gear oils which satisfy the above specifications may be used. There will be no product listing.

**In addition**, the following trade products may be used:

**Manufacturer (21M)**

PANOLIN DISTRIBUTION AG, MADETSWIL/CH  
PANOLIN DISTRIBUTION AG, MADETSWIL/CH  
PANOLIN DISTRIBUTION AG, MADETSWIL/CH

**Trade name (21M)**

PANOLIN HLP SYNTH 68  
PANOLIN HLP SYNTH 32  
PANOLIN HLP SYNTH 46

**ZF approval number**

ZF002019  
ZF008238  
ZF000592

**Lubricant class 21N**

Transmission oil with limited-slip additives

Viscosity grades: SAE 75W-90 / 75W-110 / 75W-140 / 80W-90 / 85W-90 / 90

**Manufacturer (21N)**

BAYWA AG MÜNCHEN, MÜNCHEN/DE  
 CHAMPION CHEMICALS N.V., HEMIKSEM/BE  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 EXXONMOBIL CORPORATION, HOUSTON, TX/US  
 FINKE MINERALÖLWERK GMBH, 27374 VISSLHÖVEDE/DE  
 FUCHS PETROLUB SE, MANNHEIM/DE  
 KROON-OIL B.V., ALMELO/NL  
 MOTOREX AG, LANGENTHAL/CH  
 PAKELO MOTOR OIL S.P.A. A S.U., SAN BONIFACIO (VR)/IT  
 ROCK OIL, WARRINGTON/GB  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/DE  
 TOTALENERGIES LUBRIFIANTS, NANTERRE/FR  
 WILHELM HOYER B.V. & CO. KG, VISSLHÖVEDE/DE  
 WOLF OIL CORPORATION N.V., HEMIKSEM/BE  
 ZELLER+GMELIN GMBH&CO.KG, EISLINGEN/DE

**Trade name (21N)**

TECTROL MULTIGEAR LS 90 LV  
 CHAMPION OEM SPECIFIC 80W-90 LS GL 5 ZF-N  
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP  
 MOBIL DELVAC MODERN AXLE OIL 80W-90 LIMITED SLIP  
 AVIATICON HYPOID LS PLUS 80W-90  
 TITAN SUPERGEAR LS SAE 80W-90  
 GEARLUBE LS 80W-90  
 MOTOREX YORK LS UNIVERSAL SAE 80W/90  
 UNIVERSAL GEAR EP LS SAE 80W-90  
 SD LS 80W-90  
 SRS VIOLIN RSH PLUS 80W-90  
 DYNATRANS DAX 80W-90  
 HOYER GEAR M-LS+ 80W-90  
 WOLF OFFICIALTECH 80W-90 LS GL 5 ZF-N  
 DIVINOL MULTI-AXLE LS 80W90

**ZF approval number**

ZF009443  
 ZF011947  
 ZF009436  
 ZF010924  
 ZF011976  
 ZF008289  
 ZF009458  
 ZF011905  
 ZF010992  
 ZF010297  
 ZF009472  
 ZF009422  
 ZF011995  
 ZF011930  
 ZF010462