



## Axles for buses

## List of lubricants TE-ML 12

Product group	Lubricant classes for service fills (1)
Axles, axle drive units, wheel heads and wheel hubs without further details	ZF-Ecofluid X 12B / 12C / 12D / 12E
Low-floor offset axles AV 131 and AV 132 <b>without multi-disc self-locking differentials</b>	ZF-Ecofluid X 12B / 12E (2)
Low-floor offset axles AV 131, other axles and axle drive units <b>with multi-disc self-locking differentials</b>	12C / 12D
Wheel ends with compact bearing (hub units) A- and AV-Axles	Fuchs Renolit LX-PEP 2 Fuchs Renolit LX-N EP 2

- (1) **Refer to the following pages for approved commercial products and oil change intervals.**  
(2) In countries, where oils of the lubricant classes 12E and 12B are not available, the oils of the lubricant classes 12C and 12D - only admissible for these exceptional cases - are approved.

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). Doesn't apply to wheel ends with compact bearing (hub units).

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.

The list of lubricants TE-ML 12, **Edition 01.10.2006** 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](http://www.zf.com).

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**ZF Friedrichshafen AG**

D-88038 Friedrichshafen

**Oil change intervals****List of lubricants TE-ML 12**

Product group	Lubricant class	12B	12C	12D	ZF-Ecofluid X 12E
	Operating conditions	oil change intervals (3)			
Axles without multi-disc self-locking differential	Scheduled routes	180.000 km 4 years	90.000 km 2 years	180.000 km 2 years	150.000 km 3 years
	Long-distance coach journeys	240.000 km 4 years	120.000 km 2 years	240.000 km 2 years	150.000 km 3 years
Axles with multi-disc self-locking differential	Scheduled routes	---	60.000 km 1 year	90.000 km 2 years	---
	Long-distance coach journeys	---	90.000 km 1 year	120.000 km 2 years	---

**Grease change intervals****List of lubricants TE-ML 12**

Product group	Grease	Grease change interval (4)
Wheel mountings with individual bearings on front and rear axles	Saponified lithium mineral oil-based multigrade grease of the NLGI class 2 (grease code KP2K-30 in accordance with DIN 51825 or ISO-L-XCCHB2 in accordance with ISO 6743-9).	500.000 km 2 years
Hub unit mountings on rear axles	Fuchs Renolit LX-PEP 2 Fuchs Renolit LX-N EP 2	500.000 km 4 years

(3) Oil change required, depending on what occurs first.

(4) Grease change required, depending on what occurs first.

**Lubricant class 12B**

Transmission oil (base oil synthetic)

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

**Manufacturer (12B)**

ADDINOL LUBE OIL GMBH, LEUNA/D  
 AGIP SCHMIERTECHNIK GMBH, WÜRZBURG/D  
 AGIP SCHMIERTECHNIK GMBH, WÜRZBURG/D  
 ARAL AG, BOCHUM/D  
 AVIA MINERALÖL-AG, MÜNCHEN/D  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BUCHER AG LANGENTHAL, LANGENTHAL/CH  
 BUCHER AG LANGENTHAL, LANGENTHAL/CH  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CEPSA LUBRICANTS S.A., MADRID/E  
 CHEVRONTXACO, GHENT/B  
 COGNIS DEUTSCHLAND GMBH, MONHEIM/D  
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/F  
 DE OLIEBRON B.V., ZWIJNDRECHT/NL  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FUCHS PETROLUB AG, MANNHEIM/D  
 FUCHS PETROLUB AG, MANNHEIM/D  
 GINOUVES GEORGES SA, LA FARLEDE/F  
 GULF OIL INTERNATIONAL, PITTSBURG/USA  
 HAFA, PARIS/F  
 HUILES BERLIET S.A., SAINT PRIEST/F  
 IGOL FRANCE SA, AMIENS/F  
 KUWAIT PETROLEUM R&T B.V., EUROPOORT RT/NL  
 MEGUIN GMBH & CO. KG MINERALOELWERKE, SAARLOUIS/D  
 MILLERS OILS LIMITED, BRIGHOUSE/GB  
 MOTUL SA, AUBERVILLIERS CEDEX/F  
 NESTE MARKKINOINTI OY, ESPOO/FIN  
 NEW PROCESS AG, TÜBACH/CH  
 OEST, GEORG MINERALÖLWERK, FREUDENSTADT/D  
 OMV REFINING & MARKETING GMBH, WIEN/A  
 OMV REFINING & MARKETING GMBH, WIEN/A  
 PAKELO MOTOR OIL S.R.L., SAN BONIFACIO (VR)/I  
 PANOLIN AG, MADETSWIL/CH  
 PETROGAL S.A., LISBOA/P  
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/D  
 REPSOL YPF LUBRICANTES Y ESPECIALIDADES, MADRID/E  
 S.A.E.L., MADRID/E  
 SHELL INTERNATIONAL PETROLEUM COMP LTD, LONDON/GB  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/D  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/D  
 STRUB + CO AG, REIDEN/CH  
 SUOMEN PETROOLI OY, HAMINA/FIN  
 SUOMEN PETROOLI OY, HAMINA/FIN  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 VALVOLINE EUROPE, DORDRECHT/NL  
 VALVOLINE EUROPE, DORDRECHT/NL  
 VALVOLINE EUROPE, DORDRECHT/NL  
 VEEDOL INTERNATIONAL, PANGBOURNE READING/GB  
 YACCO, ST PIERRE LES ELBEUF/F

**Trade name (12B)**

ADDINOL GETRIEBEÖL GH 75W 90 SL, SAE 75W-90  
 AGIP HLX, SAE 75W-90  
 AGIP ROTRA TRUCK GEAR S, SAE 75W-90  
 ARAL GETRIEBEÖL SNA-C SAE 75W-90  
 AVIA SYNTOGEAR FE 75W-90 EP  
 BP ENERGEAR SHX 75W90  
 ENERGEAR SHX-M SAE 75W-90  
 MOTOREX PENTA TL  
 MOTOREX UNISYNT TX  
 CASTROL DYNADRIVE PLUS 75W90  
 CASTROL SAF-XO SAE 75W-90  
 SAF-XT  
 CEPSA TRANSMISIONES EP FE+LD 75W-90  
 MULTIGEAR S 75W-90  
 COGNIS EMGARD UAF 4209, SAE 75W-90  
 GEAR SLX 75W140  
 TOR UNIGEAR 75W90 LD  
 ROTRA LSX 75W-90  
 ESSO GEAR OIL TDL 75W-90  
 MOBIL DELVAC SYNTHETIC GEAR OIL 75W-90  
 MOBIL DELVAC SYNTHETIC GEAR OIL 80W-140  
 MOBILUBE 1 SHC 75W-90  
 MOBILUBE SHC 75W-90  
 MOBILUBE SHC 80W-140  
 TUTELA TRUCK FE-AXLE (75W-90)  
 FUCHS TITAN CYTRAC SL SAE 75W-90  
 TITAN CYTRAC HSY SAE 75W-90  
 YORK 896  
 GULF SYNGEAR 75W-90  
 EUROGEAR SAE 75W-90  
 RTO LONGEVIA PXD ECO 75W-90  
 SYNTHEGEAR SAE75W90  
 Q8 TRANS XGS SAE 75W-90  
 MEGOL GETRIEBEOEL TRUCK-SYNTH SAE 75W-90  
 SYNTRAN FE/MILLERS TRX SYNTH 75W/90  
 MOTUL GEAR SYNT TDL 75W-90  
 NESTE HYPOIDI TDL S 75W-90  
 GEAROIL SYNTH  
 OEST SYNTH GETRIEBEÖL SAE 75W-90  
 OMV GEAR OIL BSX SAE 75W-90  
 OMV UNIGEAR S SAE 75W-90  
 PAKELO GLOBAL MULTIGEAR TS SAE 75W/90  
 PANOLIN SUPER DUTY SYNTH 75W/90  
 GALP TRANSVEX TDL 75W90  
 RAVENOL GETR.OEL 75W-90 VSG VOLLSYNTH.  
 CARTAGO FE LD 75W90  
 GULF SYTHETIC GEAR LUBRICANT 75W-90  
 SHELL SPIRAX ASX 75W-90  
 WINTERSHALL GETRIEBEFLUID AFS  
 WINTERSHALL GETRIEBEFLUID BOS  
 VULCOGEAR SYNT SGX 75W-90  
 TEBOIL HYPOID SAE 75W-140  
 TEBOIL HYPOID SAE 75W-90  
 ANTA EPS 75W-90  
 FINA PONTONIC FDL 75W-90  
 TOTAL TRANSMISSION BM 75W-90  
 TOTAL TRANSMISSION SYN FE 75W-90  
 TRANSELF BM 75W-90  
 TRANSELF SYNTHESE FE 75W-90  
 SYNPOWER GEAR OIL TDL 75W-90  
 VALVOLINE SYNPOWER STX GL-5 75W-140  
 VALVOLINE SYNPOWER STX GL-5 75W-90  
 VEEDOL SAF 66  
 BVX 1000

ZELLER + GMEIN GMBH & CO., EISLINGEN/D

DIVINOL SYNTHOGEAR SL 75W-90

**Lubricant class 12C**

Transmission oil with limited-slip additives (base oil mineral)

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

**Manufacturer (12C)**

ADDINOL LUBE OIL GMBH, LEUNA/D  
 ADDINOL LUBE OIL GMBH, LEUNA/D  
 ARAL AG, BOCHUM/D  
 AVIA MINERALÖL-AG, MÜNCHEN/D  
 AVIA MINERALÖL-AG, MÜNCHEN/D  
 BAYWA AG, MÜNCHEN/D  
 BLASER SWISSLUBE AG, HASLE-RÜEGSAU/CH  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BUCHER AG LANGENTHAL, LANGENTHAL/CH  
 CALPAM MINERALÖL-GMBH, ASCHAFFENBURG/D  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CHEVRON BRASIL LTDA., RIO DE JANEIRO/BRAZIL  
 CHEVRONTEXACO, GHENT/B  
 CHEVRONTEXACO, GHENT/B  
 CHEVRONTEXACO, SYDNEY/AUS  
 CHEVRONTEXACO, SYDNEY/AUS  
 CHEVRONTEXACO, SYDNEY/AUS  
 CHEVRONTEXACO, SYDNEY/AUS  
 CLAAS KGAA MBH, HARSEWINKEL/D  
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/F  
 DE OLIEBRON B.V., ZWIJNDRECHT/NL  
 ENGEN PETROLEUM LTD., CAPE TOWN/ZA  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FUCHS PETROLUB AG, MANNHEIM/D  
 GRUPA LOTOS SA, GDANSK/PL  
 GS CALTEX CORPORATION, SEOUL/ROK  
 GULF OIL INTERNATIONAL, PITTSBURG/USA  
 HAFA, PARIS/F  
 HUILES BERLIET S.A., SAINT PRIEST/F  
 IGOL FRANCE SA, AMIENS/F  
 JOHN DEERE, WATERLOO/USA  
 JOHN DEERE, WATERLOO/USA  
 KOMPRESSOL-OEL VERKAUFS GMBH, KÖLN/D  
 KUWAIT PETROLEUM R&T B.V., EUROPOORT RT/NL  
 LIQUI MOLY GMBH, ULM/D  
 MAZIVA ZAGREB D.O.O, ZAGREB/HR  
 MEGUIN GMBH & CO. KG MINERALOELWERKE, SAARLOUIS/D  
 MINERALÖL-RAFFIN. DOLLBERGEN, UETZE-DOLLBERGEN/D  
 MOL-LUB LTD., ALMASFUZITO/H  
 NORTHLAND PRODUCTS COMPANY, WATERLOO/USA  
 NOVA STILMOIL SPA, MODENA/I  
 OEST, GEORG MINERALÖLWERK, FREUDENSTADT/D  
 OMV REFINING & MARKETING GMBH, WIEN/A  
 ORLY INTERNATIONAL G.I.E., VIEUX-THANN/F  
 PAKELO MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELO MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PANOLIN AG, MADETSWIL/CH  
 PETROGAL S.A., LISBOA/P  
 PTT PUBLIC COMPANY LIMITED, BANGKOK/TH  
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/D  
 REPSOL YPF LUBRICANTES Y ESPECIALIDADES, MADRID/E  
 S.A.E.L., MADRID/E  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/D  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 UNIL S.A., SAUMUR CEDEX/F

**Trade name (12C)**

ADDINOL GETRIEBEÖL GH 80W-90 LS  
 ADDINOL GETRIEBEÖL GH 85W-90 LS  
 ARAL GETRIEBEOL HYP LS 90  
 AVIA HYPOID 90 LS  
 AVIA HYPOID 90 LS, 85W-90  
 BAYWA GETRIEBEÖL HYPOID LS 90  
 GETRIEBEÖL LS 85W90  
 BP ENERGEGEAR LIMSLIP 90  
 FRONTOL GETRIEBEÖL LS 90  
 MOTOREX GEAR OIL UNIVERSAL LS 80W/90  
 CALPAM GEAR OIL LS 90  
 CASTROL HYPOY LS 90  
 CASTROL LSX  
 GEARTEX LS 85W140  
 GEARTEX LS 80W-90  
 GEARTEX LS 85W-90  
 CALTEX GEAR OIL ZF SAE 80W-90  
 CALTEX GEAR OIL ZF SAE 85W-140  
 CALTEX GEAR OIL ZF SAE 90  
 CLAAS AGRISHIFT BLS 90  
 GEAR T ( 90 )  
 TOR SUPER GEAR OIL LS 80W90  
 ENGEN GEARLUBE EP 90 LS - SAE 80W-90  
 AGIP ROTRA MP/S 85W-90  
 ESSO GEAR OIL LSA 85W-90  
 MOBILUBE LS 80W-90  
 MOBILUBE LS 85W-90  
 AKCELA AXLEPOWER (80W90)  
 AMBRA AXF 80W90  
 AMBRA STF (80W90)  
 TUTELA W90/LS (SAE 80W-90)  
 TITAN GEAR LS 90  
 LOTOS TITANIS LS GL-5 SAE 80W/90  
 DIC LS GEAR OIL 80W/90  
 GULF GEAR LS 90  
 HYPOID PA SAE 80W-90  
 RTO EP 90 GL  
 HYPOID BPA SAE90  
 GL-5 GEAR LUBRICANT WITH LS ADDITIVE (85W140)  
 JOHN DEERE GEAR LUBRICANT WITH LS ADDITIVE 80W-90  
 KOMPRESSOL-HYPOID LS SAE 90  
 Q8 T 45 SAE 90  
 HYPOID GETRIEBEÖL GL 5 SAE 85W-90 LS  
 INA HIPENOL GTL LS 90  
 MEGOL HYPOID-GETRIEBEOEL GL 5 SAE 85W-90 LS  
 PENNASOL SPERRDIFFERENTIAL HYPOID GETRIEBEOEL LS90  
 MOL HYKOMOL LS 85W-90  
 POSI-GRIP JDZF 80W90  
 GEARING WONDER LS SAE 85W90  
 OEST GETRIEBEÖL HYPOID LS 90  
 OMV GEAR OIL LS SAE 85W-90  
 ORLY TUCANA LS  
 PAKELO UNIVERSAL GEAR EP/LS SAE 85W/140  
 PAKELO UNIVERSAL GEAR EP/LS SAE 80W/90  
 PANOLIN SUPER DUTY LS 90  
 GALP LS 90  
 PTT LIMITED SLIP (SAE 80W-90)  
 RAVENOL SPERRDIFF.-GETR.-OEL LS 90  
 CS EP AUTOBLOCANTE SAE 85W140  
 GULF LS REAR AXLE OIL 80W-90  
 WINTERSHALL WIOLIN RSH  
 ANTAR BLS 90  
 FINA PONTONIC LS 80W-90  
 TOTAL TRANSMISSION DA 80W-90  
 TRANSOLF BLS 90  
 UNIL OPAL GEAR AB-EP SAE 85W90

YACCO, ST PIERRE LES ELBEUF/F

BVX LS 200

**Lubricant class 12D**

Transmission oil with limited-slip additives (base oil synthetic)

Viscosity grades: SAE 75W-90 / 75W-140

**Manufacturer (12D)**

AGIP SCHMIERTECHNIK GMBH, WÜRZBURG/D  
BP INTERNATIONAL, PANGBOURNE, READING/GB  
BP INTERNATIONAL, PANGBOURNE, READING/GB  
CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/D  
TOTAL LUBRIFIANTS S.A., PARIS/F  
TOTAL LUBRIFIANTS S.A., PARIS/F  
VEEDOL INTERNATIONAL, PANGBOURNE READING/GB  
VEEDOL INTERNATIONAL, PANGBOURNE READING/GB

**Trade name (12D)**

AGIP HLZ, SAE 75W-140  
BP ENERGEAR SHX S 75W140  
BP ENERGEAR SHX-ZR 75W-140  
CASTROL SAF-X SAE 75W-140  
CASTROL SAF-XJ SAE 75W-140  
CASTROL SAF-XLS SAE 75W-90  
MOBIL GEARLUBE VS 500  
WINTERSHALL GETRIEBEFLUID BMS PLUS  
FINA PONTONIC MLX 75W-140  
TOTAL TRANSMISSION LS 75W-140  
VEEDOL SAF 22  
VEEDOL SAF 44

**Lubricant class 12E**

Transmission oil (base oil mineral or part-synthetic)

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

**Manufacturer (12E)**

ADDINOL LUBE OIL GMBH, LEUNA/D  
 ARAL AG, BOCHUM/D  
 AVIA MINERALÖL-AG, MÜNCHEN/D  
 BAYWA AG, MÜNCHEN/D  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 BP INTERNATIONAL, PANGBOURNE, READING/GB  
 CALPAM MINERALÖL-GMBH, ASCHAFFENBURG/D  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CASTROL INTERNATIONAL, PANGBOURNE READING/GB  
 CHEVRONTEXACO, GHENT/B  
 CONDAT LUBRIFIANTS, CHASSE SUR RHONE/F  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 ENI S.P.A. REFINING & MARKETING DIVISION, ROME/I  
 EXXON MOBIL CORPORATION, FAIRFAX, VIRGINIA/USA  
 FL SELENIA S.P.A., VILLASTELLONE/I  
 FUCHS PETROLUB AG, MANNHEIM/D  
 FUCHS PETROLUB AG, MANNHEIM/D  
 GENOL GMBH & CO., WIEN/A  
 HUILES BERLIET S.A., SAINT PRIEST/F  
 HUILES BERLIET S.A., SAINT PRIEST/F  
 IGOL FRANCE SA, AMIENS/F  
 KUWAIT PETROLEUM R&T B.V., EUROPOORT RT/NL  
 KUWAIT PETROLEUM R&T B.V., EUROPOORT RT/NL  
 LIQUI MOLY GMBH, ULM/D  
 MAROIL S.R.L. CONC. BARD AHL MANU. CO.,ALTOPASCIO/I  
 MAZIVA ZAGREB D.O.O, ZAGREB/HR  
 MEGUIN GMBH & CO. KG MINERALÖELWERKE, SAARLOUIS/D  
 MILLERS OILS LIMITED, BRIGHOUSE/GB  
 MOL-LUB LTD., ALMASFUZITO/H  
 OEL-BRACK AG, HUNZENSCHWIL/CH  
 OEST, GEORG MINERALÖLWERK, FREUDENSTADT/D  
 OMV REFINING & MARKETING GMBH, WIEN/A  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PAKELo MOTOR OIL S.R.L, SAN BONIFACIO (VR)/I  
 PANOLIN AG, MADETSWIL/CH  
 PETRO-CANADA LUBRICANTS, MISSISSAUGA/CDN  
 PETRO-CANADA LUBRICANTS, MISSISSAUGA/CDN  
 PETROBRAS DISTRIBUIDORA S.A., DUQUE DE CAXIAS/BR  
 PETROGAL S.A., LISBOA/P  
 RAFINERIA NAFTY JEDLICZE SA, JEDLICZE/PL  
 RAVENSBERGER SCHMIERSTOFFVERTRIEB GMBH, WERTHER/D  
 SHELL INTERNATIONAL PETROLEUM COMP LTD, LONDON/GB  
 SHELL INTERNATIONAL PETROLEUM COMP LTD, LONDON/GB  
 SRS SCHMIERSTOFF VERTRIEB GMBH, SALZBERGEN/D  
 STRUB + CO AG, REIDEN/CH  
 SUOMEN PETROOLI OY, HAMINA/FIN  
 TEDEX PRODUCTION SP.Z.O.O., TOMASZOW MAZOWIECKI/PL  
 TEXACO CHILE S.A.C., SANTIAGO/RCH  
 TEXAS REFINERY CORP. OF CANADA LTD, TORONTO/CDN  
 TOTAL LUBRIFIANTS S.A., PARIS/F  
 TOTAL LUBRIFIANTS S.A., PARIS/F

**Trade name (12E)**

ADDINOL GETRIEBEÖL GX 80 W 90 ML  
 ARAL GETRIEBEOL EP PLUS 80W-90  
 AVIA SYNTOGEAR FE 80W-90  
 BAYWA SUPER 8090 MC  
 BP ENERGEGEAR DL 80W-90  
 BP ENERGEGEAR HT 80W-90  
 BP ENERGEGEAR HYPO 80W-90  
 BP ENERGEGEAR HYPO 85W-140  
 ENERGEGEAR HT 85W140  
 FRONTOL GETRIEBEÖL FE SAE 80W-90  
 CALPAM MULTI GEAR OIL FE 80W90  
 CASTROL AF-STO 85W140  
 CASTROL AGRI GEAR ULTRA  
 CASTROL DYNADRIVE 80W-90  
 CASTROL EPX 80W-90  
 CASTROL EPX 85W-140  
 CASTROL MULTIDRIVE 80W90  
 MULTIGEAR 80W-90  
 GEAR SLX 75W90  
 AGIP ROTRA MP/C 80W-90  
 AGIP ROTRA MP/C 85W-140  
 AGIP ROTRA TRUCK GEAR 85W-140  
 ROTRA TRUCK GEAR 80W-90  
 MOBILUBE S 80W-90  
 ARBOR TRW 90 (SAE 80W90)  
 TITAN GEAR HYP LD SAE 80W-90  
 TITAN SUPERGEAR MC 80W-90  
 GENOL GEAR-SYN 80W-90  
 RTO LONGEVIA P ECO 80W-140  
 RTO LONGEVIA P ECO 80W-90  
 GEAR M 80W90  
 Q8 AXLE OIL XG SAE 80W-140  
 Q8 GEAR OIL XG SAE 80W-90  
 HYPOID GETRIEBEÖL TDL SAE 80W-90  
 BARD AHL T&D OIL 80W 90  
 INA HIPENOL TDL 80W-90  
 MEGOL HYPOID-GETRIEBEOEL TDL SAE 80W-90  
 SYNTRAN II/MILLERS TRX 80W/90  
 MOL HYKOMOL KZ 80W-90  
 MIDLAND SUPER M 5 80W-90  
 OEST MEHRZWECK-GETRIEBEÖL FE SAE 80W-90  
 OMV UNIGEAR SAE 80W-90  
 PAKELo GLOBAL GEAR CBS SAE 75W/90  
 PAKELo GLOBAL GEAR SA SAE 80W/90  
 PAKELo GLOBAL GEAR SA SAE 85W/140  
 PAKELo GLOBAL GEAR SA SAE 85W/90  
 PAKELo GLOBAL MULTIGEAR CBS  
 PAKELo GLOBAL MULTIGEAR CBS DLS  
 PAKELo GLOBAL MULTIGEAR SA SAE 80W/140  
 PANOLIN TOPGEAR 80W/90  
 TRAXON XL SB 80W-140  
 TRAXON XL SYNTHETIC BLEND 75W-90  
 LUBRAX GOLD SAE 85W/140  
 GALP TRANSVEX TDL 85W140  
 HIPOL EXTRA GL-5 80W-90  
 RAVENOL SLG SPEC. LKW GETR.ÖL 80W90  
 SHELL SPIRAX AX PLUS 80W-90  
 SHELL SPIRAX MX 80W-90  
 WINTERSHALL GETRIEBEFLUID SML 80W-90  
 STRUB MULTIGEAR SGO 80W-90  
 TEBOIL HYPOID SAE 80W-140  
 TEDEX SUPER GEAR OIL (3343ML) SAE 80W90  
 AXLE OIL SAE 85W140  
 SYNTEX 3000 80W-140  
 ANTAR UNIVERSAL FE 80W-140  
 ANTAR UNIVERSAL FE 80W-90

TOTAL LUBRIFIANTS S.A., PARIS/F  
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TOTAL LUBRIFIANTS S.A., PARIS/F  
VALVOLINE EUROPE, DORDRECHT/NL  
VALVOLINE EUROPE, DORDRECHT/NL  
ZELLER + GMELIN GMBH & CO., EISLINGEN/D  
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/D

FINA PONTONIC A 80W-140  
FINA PONTONIC MDL 80W-90  
TOTAL TRANSMISSION MDL 80W-90  
TOTAL TRANSMISSION RS FE 80W-140  
TOTAL TRANSMISSION RS FE 80W-90  
TRANSELF UNIVERSAL FE 80W-140  
TRANSELF UNIVERSAL FE 80W-90  
VALVOLINE STX GEAR OIL GL-5 80W-140  
VALVOLINE STX GEAR OIL GL-5 80W-90  
DIVINOL GEAR OIL STO SAE 80W-90  
ZF-ECOFLUID X