BP Autran MBX is a “universal” type transmission fluid and can also be used in most power steering systems and certain manual gearboxes where an ATF is required.

### Product Features and Benefits
- Meeting most manufacturers specifications, it can be used to rationalise fleet requirements and reduces the chance of incorrect application
- Excellent low temperature fluidity and high thermal stability
- Protection against rust and corrosion
- Good seals compatibility
- Enhanced friction characteristics and wear protection

### Specifications
- Mercedes Benz 236.6
- ZFTE-ML 04D, -14A, 17C
- MAN 339 Type D
- Ford M2C-185A, ESP-M2C166-H or SQM-2C9010-A
- General Motors IID
- General Motors Allison C4
- Renk / Voith

BP Autran MBX can also be used for service fill in automatic transmission systems fitted by most manufacturers, such as Audi, BMW, Jaguar, Opel, PSA, Porsche, Renault, Saab, Scania, Volvo, Volkswagen, and Renk and Voith for Diwa/Midimat transmissions.

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
A range of premium quality multigrade mineral oil based hydraulic fluids of high Viscosity Index (VI) and containing zinc-free anti-wear additives. BP Bartran HV oils display high performance characteristics with outstanding ultra fine filterability. The selection of shear stable V-improvers ensures that the viscosity is maintained at design levels in service.

**Product Features and Benefits**
- Wide operating temperature range
- Easy cold start-up
- Highest degree of equipment protection
- Superior ultra fine filterability even in wet conditions
- Extended oil life and improved tolerance of severe service conditions

**Applications**
- BP Bartran HV oils are intended for severely stressed hydraulic systems requiring a high level of antiwear performance or ultra fine filtration in two main types of duty:
  - Outdoor plant operating in very wide temperature variations - such as machinery subjected to cold start-up conditions and high-temperature continuous running.
  - Indoor manufacturing equipment that incorporates control systems requiring a hydraulic fluid whose viscosity change with temperature is minimal, such as precision machine tools and copying machines.
- BP Bartran HV are fully compatible with elastomer materials commonly used for static and dynamic seals e.g. leading performance in anti-wear protection, oxidation resistance and thermal stability

The BP Bartran HV oils meet specification requirements of all the major manufacturers of hydraulic pumps and motors, and the following approvals/recommendations apply:
- DIN 51 524, Part 3
- ISO 6743/4 (NFE 48-603 and NFE 60-203), Category HV
- Vickers mobile machinery, exceeds M-2952-S specification (pump 35VQ.25)
- Rexnord-Racine vane pumps
- Mannesmann Rexroth Hydromatik piston pumps
- Sigma-Rexroth gear pumps
- Ford M-6 C 32 . Sauer . Marrel Hydro
- Frank Mohn (France), marine cargo-handling systems

Follow the recommendations of equipment manufacturers regarding filtration and oil change intervals. BP Bartran HV oils are suitable for a wide range of other applications e.g. certain machinery bearings and gears, thus providing scope for rationalisation.

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Energear EP 80W-90

Automotive Gear Oils

Designed for use in a wide range of gear units with spur, bevel or helical gear design, including synchronized manual gearboxes, transmissions and axles under moderately severe load and pressure conditions. It is applicable equally for passenger cars, light and heavy trucks, agricultural and building machinery, even for topping up well run-in hypoid transmission units.

Product Features and Benefits

- High safety margin against foaming and corrosion
- Reasonable viscosity/temperature and cold flow properties
- Compatible with all seal and metal types. Offers effective protection of gear transmissions prolonging component life

Specifications

- API GL4
- ZFTEML02A, 16A, 17A & 19A

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk

Grade Code: J059
Bulk: 0001
208L: 1570
20L Monty: 2801
BP Energear HT grades are high performance lubricants, designed as complete driveline lubricants for use in all types of automotive gear boxes, axles and final drives, including hypoid axles and synchronized manual transmissions.

BP Energear HT 80W-90 is suitable for commercial vehicles, passenger cars, agricultural and construction equipment.

**Product Features and Benefits**
- BP Energear HT 80W-90 is formulated with hydrocracked base oils and a versatile additive package which allow fuel savings compared to conventional gear oils
- Complete driveline application, allowing rationalisation of lubrication stocks and minimising risk of misapplication
- Excellent wear protection under the most severe load conditions
- Superior synchronmesh compatibility
- Low temperature fluidity ensuring adequate supply of lubricant to critical components in cold start up conditions, allowing extended equipment life
- Improved thermal stability compared to conventional gear oils
- Inhibition of corrosion and foam
- Extended drain intervals allowing lower maintenance costs

**Specifications**
- API GL-1, 2, 3, 4 and 5
- ZFTE-ML 02B, 05A, 12E, 16B, 17B, 19B
- MAN 3343 ML
- Scania STO 1:0
- MT-1
BP Energear Hypo
Extreme-Pressure Automotive Multigrade Gear Oils

BP Energear Hypo oils are designed for use in hypoid, bevel and spiral gear units, axles and final drives operating under severe conditions and over a wide spectrum of operating temperatures.

Through their multigrade viscosity characteristics, they meet the requirements of several automotive manufacturers for cars, vans and commercial trucks or buses. For synchronized manual gearboxes, they should be used only if lubricants of API GL-5 performance level are explicitly recommended for such units.

Product Features and Benefits
- Superior viscosity / temperature characteristics offering excellent cold flow properties and enhanced thermal stability
- Excellent resistance to foaming and corrosion
- Formulated from high quality base oils and employing sulphur / phosphorous EP additive technology
- Compatible with the conventional seal materials used with mineral oils
- Provides effective wear protection even under severe load conditions ensuring longer component life and allowing it to be used in the final drives of most vehicles in a wide range of operating temperatures

Specifications
- API GL-5
- ZFTE-ML 05A, 07A, 12A, 16B, 17B (SAE 80W-90)
- ZFTE-ML 05A, 07A, 12A, 16D, 17B (SAE 80W-140)

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Energear SHX-M is a fully synthetic, multi-purpose heavy duty automotive gear lubricant for use in complete driveline applications requiring either API GL-4 or GL-5 performance.

BP Energear SHX-M 75W-90 Synthetic Gear and Axle Oil

It is fully compatible with conventional mineral oil based products, but its superior oxidative/thermal stability gives the potential for extended drain. BP Energear SHX-M is recommended for service fill and top-up of commercial vehicle, construction equipment and passenger car manual transmissions, transfer cases and drive axles in DAF, Scania, Volvo, Eaton, Iveco and RVI equipment.

Product Features and Benefits

- Improved fuel economy compared with conventional SAE 90 gear oils
- Complete driveline lubrication enabling reduced product inventories
- Easier operation of the transmissions provided by excellent low temperature fluidity giving improved gear changing from cold (compared to conventional SAE 80W & 90 grades)
- Excellent wear protection even in the most severe applications allowing for prolonged component life and extended drain capability
- Complete compatibility with conventional mineral oil based gear lubricants and with seals / materials used in automotive applications allows this to be used in a large number of applications
- Exceptional low temperature fluidity whilst maintaining the compatibility and ‘shiftability’ requirements of most European synchromesh gear boxes
- Provides the relatively high viscosity and load carrying characteristics necessary for heavy duty drive axles and transfer cases.
- As an SAE 75W-90 grade, its low temperature flow properties deliver fuel economy benefits while its viscosity/temperature characteristics are suitable for year round use.

Specifications

- GL-1, 2, 3, 4, 5 and MT-1
- MAN 3343 SL
- Scania STO:1
- ZFTE-ML 02B, 05B, 07A, 12B, 16F, 17B
- MIL-PRF-2105E
- Eaton 300,000 km Drain

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Energrease L21 M is a lithium-based grease with molybdenum disulphide and containing corrosion and anti-oxidant additives.

**Product Features and Benefits**
- Good load carrying capability
- Corrosion resistance
- Resistance to wash-off by water
- Good shear-stability and resistance to vibration

**Applications**
- BP Energrease L 21 M is intended for general lubrication applications of vehicles and off-highway equipment. In particular, slow-moving and heavily loaded equipment and machinery that operates with a reciprocating or short-stroke motion.
- Operating temperatures range is -25°C to +130°C.
- Meets the requirements of Caterpillar for a MoS2 grease and Ford specification ESA M1C 71A/75A.

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Energrease LC 2 is a multi-purpose, high-performance grease, based on mineral oil and a lithium-complex soap and containing a red dye to differentiate from conventional soap type lithium greases. It is formulated to provide excellent high-temperature lubrication performance.

BP Energrease LC 2 has EP load-carrying properties and contains additives selected to enhance resistance to oxidation, corrosion and wear.

**Product Features and Benefits**
- High operating temperature capability
- Suitable for highly loaded and vibratory working conditions
- Maximum equipment protection
- Long service life
- Excellent anti-corrosion properties
- Very adhesive to surfaces

**Applications**
BP Energrease LC 2 is formulated for use in grease-lubricated plain or rolling bearings operating at temperatures from -30°C to 160°C (continuous rating), peaking up to 180°C. In such cases, the frequency of re-lubrication should be increased.

BP Energrease LC 2 is primarily recommended for high temperature applications such as papermaking machinery or bearings of ventilation machinery and oven fans as well as general applications on industrial machinery, electric motors and machine tools.

BP Energrease LC 2 is also suited for bearing lubrication under highly loaded and vibratory conditions - such as in steel mills, railway axleboxes and construction equipment. The long service-life potential of BP Energrease LC 2 at temperatures over 100°C makes it ideally suited to machines in which poor accessibility makes frequent re-greasing difficult.

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Energrease LS-EP are high quality lithium-based greases incorporating solvent-refined mineral oils. They contain anti-wear and oxidation additives and corrosion inhibitors which help to provide long service life of the grease and a high level of protection for metal surfaces. All grades are water-resistant and have multi-purpose capability.

**Product Features and Benefits**
- Suitable for highly loaded applications
- Multi-purpose capability
- Long service life
- Resistance to water wash off
- Good pumpability
- Good shear stability and vibration resistance

**Applications**
BP Energrease LS-EP greases are intended for use in plain and roller bearings of all kinds of machinery - including electric motors, machine tools, textile, paper-making, plastic processing and woodworking machines as well as construction equipment.
- Recommended for use where surfaces are subjected to heavy or shock loading and at operating temperatures between -25°C and 140 °C.
- Meets the British Timken requirements for use in steel mills.

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Terrac Super Hydraulic is a mineral oil-based hydraulic fluid. It contains oxidation and corrosion-inhibitors, together with additives that minimize wear and foaming. The selection of shear stable Viscosity Index (VI) improvers ensures that the viscosity is maintained in service.

The high VI ensures optimum performance under extremes of all-year-round temperature conditions. The product is also formulated for use in all agricultural hydraulic lifting equipment and hydrostatic transmissions. The additive system used in the formulation affords protection to all of the components encountered in agricultural hydraulic circuits.

**Product Features and Benefits**
- Wide operating temperature range
- Easy cold start-up
- High degree of equipment protection
- Good filterability
- Excellent performance in anti-wear protection, oxidation resistance and thermal stability

**Specifications**
BP Terrac Super Hydraulic meets the performance requirements of DIN 51 524 Part 3 Class HVLP and ISO 6743/4 ‘Hydraulic Oils Type HV’ (NF E 48-603 and NF E 60-203). It also meets the specification/requirements of many major manufacturers, namely:
- Vickers mobile machinery form M-2950-S (pump 35VQ25)
- Rexnord-Racine vane pumps
- Mannesman Rexroth Hydromatik piston pumps
- Sigma-Rexroth gear pumps
- Ford M-6 C 32
- Marrel Hydro

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Terrac Super Motor 15W-40 is a high performance multigrade engine oil formulated to give excellent engine protection. The exceptional performance of BP Terrac Super Motor 15W-40 enables oil drain intervals to be increased to the maximum periods recommended by OEMs.

**Product Features and Benefits**
- One oil to satisfy the requirements of farm and on-road vehicles
- Reduced engine wear ensuring prolonged component life
- Exceptional protection against the formation of lacquers and deposits
- Exceptional resistance to oil ageing allows extension of the oil drain interval to the maximum period recommended by the OEM

**Specifications**
BP Terrac Super Motor 15W-40 meets the following specifications:
- API CH-4/SJ
- ACEA E3/E5/B3/B4/A3
- Mercedes Benz 228.3
- MAN M3275
- Cummins CES 20071, 72, 76, 77
- Volvo VDS-2

BP recommends the use of BP Terrac Super Motor 15W-40 in tractor engines for John Deere models 6020, 6120, 6220, 6320, 6420, 6420S & JDQ87A that can be operated with a maximum 500 hour drain interval.

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Terrac
Super Transmission

Tractor Transmission Fluid

BP Terrac Super Transmission is a low viscosity tractor transmission fluid intended for use in power-shift transmissions and where oil-immersed clutches, brakes and fluid couplings are incorporated in the drive-line.

Product Features and Benefits

- Excellent gear wear protection and frictional characteristics for wet brakes and power-take-off clutches
- Good thermal/oxidative stability and high level of shear stability
- Excellent anti-corrosion and anti-rust properties

Specifications

BP Terrac Super Transmission is approved against:

- Massey Ferguson M1143 (approved)
- Ford ESN-M2C-134D
- Volvo Construction Equipment (VME WB 101)

BP Terrac Super Transmission also meets the transmission requirements of Caterpillar T0-2 and API GL-4, John Deere J20C, Massey Ferguson M1135 (Service fill), Case MS 1207.

BP certifies that BP Terrac Super Transmission can be used in agricultural equipment where lubricants meeting Case MS1209, MAT 3505 and MAT 3525 specifications are required.

Please note BP Terrac Super Transmission should not be used for top up and should not be mixed with genuine fluids meeting the CASE MS1209 and MAT 3505 specifications. In such instances the oil should be completely replaced.

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Terrac Super Universal 10W-30 is an agricultural lubricant specifically designed to solve a range of lubrication requirements with only one product.

BP Terrac Super Universal 10W-30 is recommended for use in the following applications:
- diesel engines, including turbocharged diesel engines
- transmissions
- hydraulic systems
- final drives
- wet brakes and immersed clutches

Product Features and Benefits
- Low temperature flow to facilitate starting and give rapid response in hydraulic systems
- Enhanced filterability, and increased power for tools
- Low volatility, to minimize oil consumption
- Excellent viscosity stability enables high performance and protection throughout the year and in all climates
- Improved soot control using a new additive that reduces oil thickening and engine wear

Specifications
BP Terrac Super Universal 10W-30 can be used whenever the following specifications are required:
- Engines: (SAE 10W-30): API CF-4/CE/SF; MIL-L 2104-D
- Transmissions: API GL4; MIL-L 2105, ZF TE ML 06C, 07B, ZF TE-ML 06D/06E
- Hydraulics: (ISO VG 68): NFE 48603 HV, DIN 51524/3 HLVP

BP Terrac Super Universal is approved against MF 1144 (Approval number: M1144-1/C/016), and meets the following manufacturer requirements:
- MF 1139, 1135
- Ford M2C 159B, M2C86A, M2C 134 B,C
- Ford M2C 134 D - Service fill only
- John Deere JDM J27 & J20C
- Case MS 1207.

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Terrac Universal 15W-30 is specifically designed to solve a range of lubrication problems with one oil.

BP Terrac Universal 15W-30 is suitable for:
- Diesel engines
- Transmissions
- Hydraulic systems
- Wet brakes and immersed clutches

Product Features and Benefits
- Low temperature flow to facilitate starting and give rapid response in hydraulic systems
- Enhanced filterability, and increased power for tools
- Low volatility, to minimize oil consumption
- Excellent viscosity stability enables high performance and protection throughout the year and in all climates
- Improved soot control using a new additive that reduces oil thickening and engine wear

Specifications
Engine (15W-30): API CE/SF
Transmission: API GL4, ZF TE-ML 06B/07B
Hydraulic: NFE 48603 HV, DIN 51524/3 HVLP

BP Terrac Universal 15W-30 meets the following manufacturer requirements:
- MF 1139, 1135
- Ford M2C 159A & B, M2C86A
- JDM J27 & J20C
- Case MS 1207

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Vanellus C3 Mono oils are versatile diesel engine oils that can also be used in hydraulic systems and transmissions. They are formulated using quality mineral base oils and additives to provide protection under severe operational conditions.

Product Features and Benefits
- Completely shear stable for “stay-in-grade” performance throughout the oil drain interval
- Cost effective product for applications where a monograde engine oil is specified

Specifications
- API CF / SF
- ACEA E1 (SAE 30 & 40 grade only)
- Suitable for use against Caterpillar TO-2

BP Vanellus C3 Mono oils can be used in turbo-charged and naturally aspirated diesel and gasoline engines. They also meet the transmission oil requirements for some off highway applications.

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Vanellus C5 Global 15W-40
Multigrade oil for diesel and gasoline engines

BP Vanellus C5 Global is a premium SAE 15W-40 engine oil providing high levels of protection for older engines and those running under light operating conditions.

Product Features and Benefits
- Versatility: designed for use in both older diesel and gasoline engines fitted in heavy duty trucks, vans, cars and off-highway vehicles and machinery
- Good levels of cleanliness, soot control and wear protection in turbo and non-turbo charged engines contributing to longer engine life
- Good low temperature sludge control in stop / start service
- Good protection against oil thickening, high temperature engine deposits, sludge build-up, oil degradation and corrosion
- Extends engine life between overhauls in both high speed / high load and in pick-up / delivery operating conditions

Specifications
- ACEA E2/B2/A2
- API CG-4/CF/SH
- MB 228.1
- MAN 271
- Volvo VDS
- VW 501.01/505.00 type performance
- Mack EO-L
- MTU Type 1
- MTU/ DDC Category 1

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Vanellus C6 Global 15W-40 is a high performance, long drain, versatile (diesel and gasoline) engine oil for use in most Euro 3 and older vehicles.

BP Vanellus C6 Global 15W-40 is recommended for mixed commercial fleets and is designed for use in vehicles that are operating under demanding conditions in all climates.

**Product Features and Benefits**
- Versatility; designed for use in diesel and gasoline engines fitted in heavy duty trucks, vans, cars and off-highway vehicles and machinery
- High levels of cleanliness, wear protection and soot handling in turbo and non-turbo charged engines contributing to longer engine life and reduced maintenance costs
- Allows long drain intervals in accordance with selected engine manufacturers’ recommendations
- Provides excellent protection against engine wear and deposit accumulation

**Specifications**
- API CH-4 / SJ
- ACEA E3/E5/A3
- MB 228.3
- MAN M3275
- Volvo VDS-2
- Cummins CES 2007/6/7
- Mack EO-M Plus
- RVI RLD
- CAT ECF-1

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Vanellus C6 Global Plus 10W-40

Versatile long drain fuel efficient engine oil

BP Vanellus C6 Global Plus is a high performance fuel efficient, long drain, versatile (diesel and gasoline) engine oil for use in Euro 3 and older vehicles.

BP Vanellus C6 Global Plus is specifically recommended for mixed commercial fleets and is designed for use in vehicles that are operating under demanding conditions in all climates.

Product Features and Benefits

- Versatility; designed for use in diesel and gasoline engines fitted in heavy duty trucks, vans, cars and off-highway vehicles and machinery
- High levels of cleanliness, wear protection and soot handling in turbo and non-turbo charged engines contributing to longer engine life and reduced maintenance costs
- Fuel efficient compared to conventional 15W-40 mineral engine oils contributing to reduced operating costs
- Lower fuel consumption and exhaust emissions means less harm to the environment
- The SAE 10W-40 viscosity grade provides good low temperature oil flow properties to enable rapid lubrication after cold starting
- Allows long drain intervals in accordance with selected engine manufacturers’ recommendations
- Provides excellent protection against engine wear and deposit accumulation

Specifications

- API CI4/SJ
- ACEA E3/E5/E7
- MB 228.3
- MAN M3275
- Volvo VDS-2
- Cummins CES 20071/2/6/7/8
- Mack EO-M Plus
- RVI RLD
- MTU Type 2
- ZFTE-ML-03A
- CAT ECF-1

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk
BP Vanellus E7 Plus has been developed to provide high levels of protection in modern European heavy duty commercial diesel engines, including Euro 4/5 vehicles requiring the ACEA E7 specification (not suitable for vehicles requiring a low SAPS formulation). BP Vanellus E7 Plus 10W-40 uses carefully selected non-conventional base oils, together with high performance additive technology.

**Product Features and Benefits**
- Excellent protection throughout the oil drain interval in the latest European diesel engines contributing to lower maintenance costs
- Extended oil drain intervals in accordance with engine manufacturer’s recommendations reduces vehicle maintenance costs
- The SAE 10W-40 viscosity grade provides good low temperature oil flow properties to enable rapid lubrication after cold starting
- Provides excellent protection against engine wear, good low temperature fluidity, high temperature viscosity retention and volatility control
- Maintains excellent performance over extended oil drain intervals

**Specifications**
- ACEA E4/E5/E7
- API CF
- MB 228.5
- MAN M3277
- RVI RXD
- Meets DAF Extended Drain Requirements
- Volvo VDS-2

For a full Technical Data Sheet and Safety Data Sheet, please visit [www.bp.com/uk](http://www.bp.com/uk)
BP Vanellus E8 Ultra 5W-30 is a fully synthetic 5W-30 diesel engine oil developed to deliver fuel economy to heavy-duty commercial vehicles and has been approved by major European OEMs for use at their maximum oil drain service intervals.

BP Vanellus E8 Ultra 5W-30 is suitable for modern vehicles, including Euro 4/5 vehicles requiring the ACEA E7 specification (not suitable for vehicles requiring a low SAPS formulation).

**Product Features and Benefits**

- Outstanding fuel economy to reduce operating costs (additional savings will be achieved if combined with Energear SHX-M or Autran LTF)
- Less harm to the environment as a result of low oil consumption reduced fuel consumption and reduced exhaust emissions. Diesel Particulates are reduced by more than 15%
- Satisfies the longest engine manufacturer’s oil drain specifications to maximise vehicle availability and reduce maintenance costs
- The highest levels of engine cleanliness, wear protection and soot handling to maximize engine life and control oil consumption
- Unsurpassed protection in the latest European diesel engines to reduce vehicle maintenance costs
- The SAE 5W-30 viscosity grade provides excellent low temperature oil flow properties to enable rapid lubrication after cold starting, when the majority of wear occurs
- Outstanding protection against wear and deposit accumulation as well as the highest levels of soot handling

**Specifications**

- SAE 5W-30
- ACEA E4/E5/E7
- MB 228.5
- MAN M3277
- Volvo VDS-2
- Scania LDF
- RVI RXD
- Cummins CES 20072 / 77
- MTU Type 3
- Mack EO-M Plus

For a full Technical Data Sheet and Safety Data Sheet, please visit www.bp.com/uk