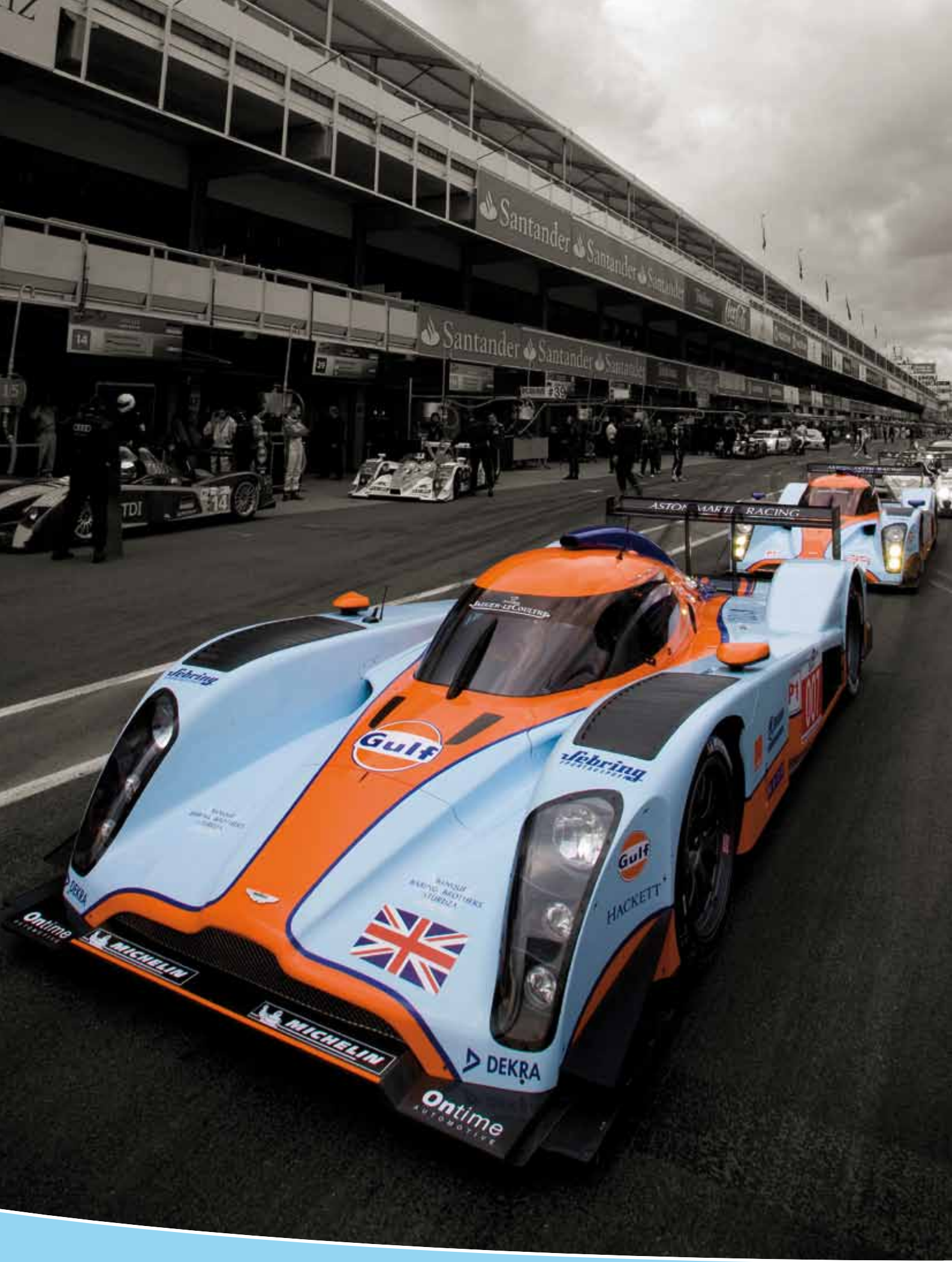


Lubricants Product Guide



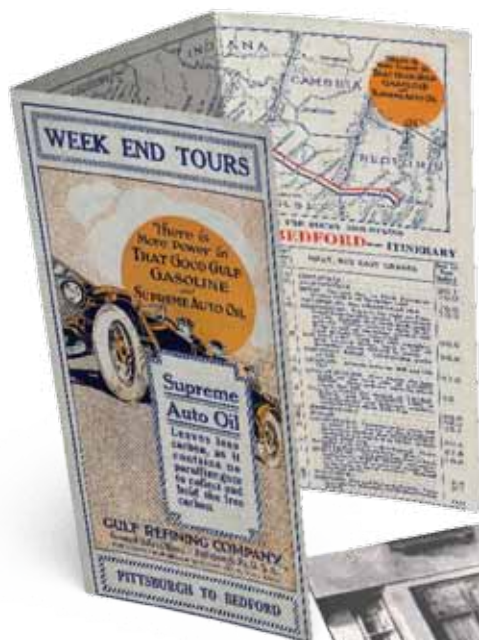
your local global brand



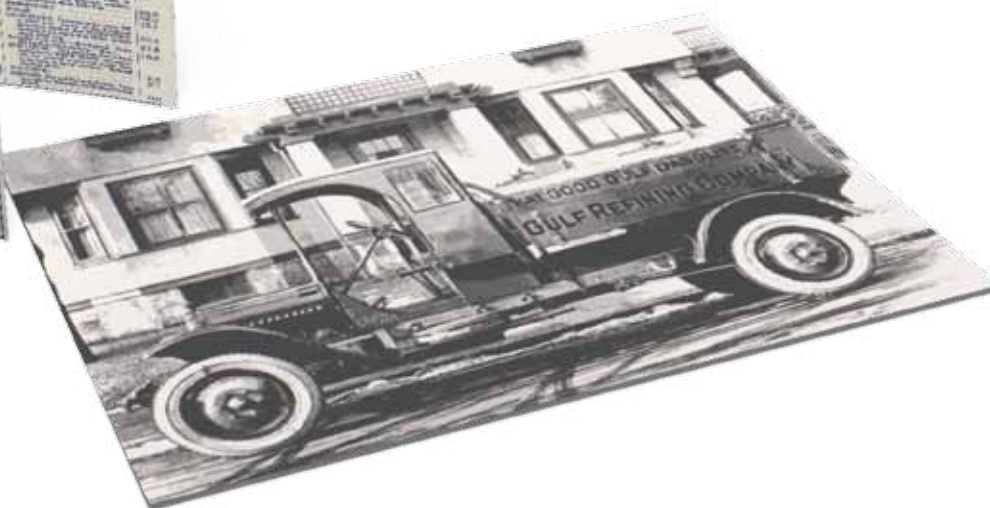


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Gulf Oil Company, a long history



At 10.30 a.m. on January 10th, 1901, the world's first high-volume oil well roared into history. The Lucas Gusher or Spindletop, as it became known, characterised the beginning of a new era for the world - The Petroleum Age - and laid the foundation on which the Gulf Oil Corporation was built.

Producing an estimated 100,000 barrels of oil per day, Spindletop put Gulf at the forefront of what was to become the global oil industry. The success in exploration and production which began over a century ago, steadily grew into a corporate culture of progress and excellence which continues in the Gulf Oil business to this day.

Over the years, Gulf has pioneered new technologies, carrying out the world's first over-water drilling operation in 1910 and creating of the world's first commercial catalytic cracking process in 1918. Gulf also became a champion of the consumer when it opened the world's first drive-through gas station in 1913. In recent times the company has pioneered Aerial Seismology and has gone on to explore for uranium and discover gas in the North Sea.

Today Gulf has great pride in its product range, in which lubricants play an important part. Having evolved over

the years, the product range has recently been completely renovated. There are now products suitable for use in almost every type of vehicle and machine. The range includes products compliant with the latest specifications, products with top-performance, and more economical and robust products suitable for use in older equipment. All Gulf's products are made to exacting quality-standards.







And the history continues...

Lubricants for the European market are produced at the Gulf Oil recognised lubricant blending plant in The Netherlands.

The factory is equipped with the latest digital technology and has a “piggable line’ blending system. There are two inline blenders which have a capacity of 30- and 40 mt per hour.

There are also 12 batch-blending tanks set-up for the production of smaller quantities. The total storage capacity for base oils is 17.000 mt. Eighty-eight storage tanks are available to store the finished products and additives. Sea vessels up to 7.500 mt deliver the base oils to the factory. The combination of the position of the factory, on deep water, and the storage and production capacity result in an effective and therefore attractive proposition for the lubricant market.



Colours of success

Ever since Gulf Oil achieved outright victory in the 1968 Le Mans 24h race with the Ford GT40, the now famous blue and orange colour combination has become a crowd favourite.

Over the last 40 years Gulf has partnered with many famous sports car manufacturers, these include Porsche, Audi, McLaren, and Aston Martin amongst others. These cars are assembled and maintained by teams of dedicated engineers

who rarely get the credit they deserve.

The fame usually focuses on the drivers and over the years such famous names as Jacky Ickx, Stefan Johansson, Derek Bell and Jo Siffert have driven Gulf cars to victory. This

has also been repeated recently with Aston Martin Racing having won the GT1 Category at Le Mans in 2008 and the Le Mans Series team and drivers titles in 2009 with Gulf. The future looks bright for the Gulf brand in motorsport.



Global presence

Gulf is an international producer and supplier of fuels and lubricants for industry, business and end-user markets. Gulf is present in more than 100 countries all over the world.

Since the foundation of the company in 1901, our company has focused on growth and innovation. For more than hundred years our technical innovations and renovations have responded to changing needs in storage, transport and logistics. The best technicians work constantly to maintain and improve the quality of our oil products. Gulf's mission is clearly summarized in the phrase 'your local global brand', which is to say that we stand close by our customers.



Passenger Car Motor Oils



High quality motor oil is an essential part of a passenger car. Gulf has a comprehensive oil portfolio for passenger cars running on gasoline, diesel, gas, hybrid or flex-fuel. These have been recently redeveloped to meet the latest specifications and carry many approvals from top-line manufacturers. The performance and life span of your car depends on good lubrication. Gulf lubricants provide the best possible protection and performance.

Gulf Formula FS 5W-30

Productcode: 1209

Gulf Formula FS 5W-30 is the latest generation synthetic passenger-car motor oil specially designed to meet the stringent requirements of all Ford Vehicles and compliant with current Euro 4 & Euro 5 emission norms for vehicles under the latest Ford Specification WSSM2C913- C. The advanced formula of Gulf Formula FS 5W-30 provides outstanding protection against wear, deposits & sludge build-up and offers fuel savings. Also suitable for passenger cars and light-duty vehicles powered by gasoline and diesel engines specified and designed for use with low-friction low-viscosity oils meeting regulation ACEA A5/B5.

NOTE: Gulf Formula FS 5W-30 is NOT suitable for use in direct-injection diesel engines with pump injectors that demand oils compliant with VW 505 01 and/ or WSS-M2C917-A.

Gulf Formula G 5W-40

Productcode: 1210

Gulf Formula G 5W-40 is a supreme-performance motor oil for passenger cars, formulated from finest quality synthetic base stocks and state-of-the-art additive technology. Gulf Formula G 5W-40 has been specially developed for all modern turbocharged, high-output gasoline and diesel engines in passenger cars, SUVs, light vans and trucks. Gulf Formula G 5W-40 has been designed to deliver long service life and minimizes deposits in engine and turbocharger to ensure maximum engine power and torque. Gulf Formula G 5W-40 oils are designed to exceed the latest industry specifications and the major car manufacturers' service-fill requirements.

Gulf Formula G 5W-40 exceeds the requirements of most modern European, North American and Japanese passenger cars including gasoline-powered racing cars.

Gulf Formula G 0W-30

Productcode: 1213

Gulf Formula G 0W-30 is a supreme-performance motor oil for passenger cars, formulated from finest quality synthetic base stocks and state-of-the-art additive technology. Gulf Formula G 0W-30 has been specially developed for all modern turbocharged, high-output gasoline- and diesel-engine passenger cars, SUVs, light vans and trucks. Gulf Formula G 0W-30 has been designed to deliver long service life and minimizes deposits in engine and turbocharger to ensure rated engine power and torque. Gulf Formula G 0W-30 oils are exclusively developed to exceed the performance requirements of Volkswagen standard VW 503 01 bringing excellent fuel economy and extending drain intervals.

Gulf Formula G 0W-30 is specially recommended for all Audi cars including TT (163 KW), S3 & RS4 models for long-life, service and improved fuel economy.

Gulf Formula FE 5W-30

Productcode: 1214

Gulf Formula FE 5W-30 is an advanced fuel economy motor oil for passenger cars, formulated from synthetic base stocks and state-of-the-art additive technology to provide outstanding protection against wear, deposits and sludge build-up. Gulf Formula FE 5W-30 is particularly developed to exceed the service-fill requirements of most recent models of Ford.

Gulf Formula FE 5W-30 is recommended for passenger cars and light-duty vehicles powered by gasoline- and diesel-engines that have been designed for low-friction/low-viscosity oils.

Gulf Formula FE 0W-30 is recommended for the latest models of Ford vehicles which require Ford M2C 913-A & M2C 913-B quality oil.

Gulf Formula ULE SAE 5W-30

Productcode: 1220

Gulf Formula ULE 5W-30 is an advanced performance synthetic, ultra-low-emission passenger car motor oil, specially designed using the latest additive chemistry to achieve medium SAPS (Sulphated Ash, Phosphorous & Sulphur) requirements. Gulf Formula ULE 5W-30 has been exclusively developed to extend life and maintain efficiency of the after-treatment devices which are used in the latest generation gasoline- and diesel engine cars.

Gulf Formula ULE 5W-30 provides exceptional cleaning power and wear protection, leading to superior overall performance. Gulf Formula ULE 5W-30 minimises deposits in engine and turbocharger

and helps in maintaining fuel economy. Gulf Formula ULE 5W-30 exceeds the performance requirements of latest low-emission oil specifications from leading car manufacturers like Daimler and BMW.

Gulf Formula ULE 5W-30 is suitable for the latest gasoline and diesel engines in MB cars meeting Euro 4 emission norms and requiring medium SAPS oils. This includes all BMW diesel cars designed to meet Euro 4 emission norms and fitted with particulate filters.

Gulf Formula ULE SAE 5W-40

Productcode: 1221

Gulf Formula ULE 5W-40 is an advanced-performance synthetic, ultra-low-emission motor oil for gasoline/diesel engine passenger cars, specially designed using the most modern additive chemistry and achieving medium SAPS (Sulphated Ash, Phosphorous & Sulphur) requirements. Gulf Formula ULE 5W-40 has been exclusively developed to extend life and maintain efficiency of the after-treatment devices. Gulf Formula ULE 5W-40 provides exceptional cleaning power and wear protection, leading to superior overall performance. Gulf Formula ULE 5W-40 minimises deposits in the engine and turbocharger and helps maintain fuel economy.

Gulf Formula ULE 5W-40 exceeds the performance requirements of the latest low-emission oil requirements of leading car manufacturers like Daimler and BMW. Gulf Formula ULE 5W-40 is suitable for the latest gasoline- and diesel-engines in MB & VW cars which meet Euro 4 emission norms and require medium SAPS oils, suitable for all BMW diesel cars which meet Euro 4 emission norms and are fitted with particulate filters.

Gulf TEC Plus 10W-40

Productcode: 1240

Gulf TEC Plus 10W-40 is a high-performance semi-synthetic motor oil for passenger cars designed to provide optimum performance in high-output, multi-valve, turbocharged & supercharged gasoline- and diesel-engines of passenger cars, vans, SUVs and light trucks. The advanced additive technology incorporated in Gulf TEC Plus 10W-40 enables it to exceed the stringent performance requirements of leading passenger car manufacturers' and global industry standards. Gulf TEC Plus 10W-40 is designed to exceed the requirements of the ACEA A3/B4 specification.

Gulf MAX Plus 15W-40

Productcode: 1320

Gulf MAX Plus Oils are a new generation of motor oils for passenger cars, developed for the latest high performance passenger cars & light-duty vehicles powered by gasoline- and diesel-engines. The advanced additive technology incorporated in Gulf MAX Plus Oils enables it to exceed the performance requirements of leading car manufacturers and global industry standards. Gulf MAX Plus Oils are recommended for high-performance, multi-valve, turbocharged & supercharged gasoline- and diesel-powered passenger cars and light-duty vehicles which require ACEA A3/B3 & API SL/CF quality oils.

Passenger Car Motor Oils

Code	Product name	Specifications
1109	Gulf Racing, SAE 5W-50	Approved: API SM/CF
1125	Gulf Racing, SAE 10W-60	Meets: ACEA A3/B4, API SL/CF
1204	Gulf Formula EFE, SAE 5W-30	Meets: ACEA C1
1205	Gulf Formula GVX, SAE 5W-30	Meets: ACEA A3/B4, BMW Longlife-04, MB 229.51 Approved: VW 504.00/507.00
1207	Gulf Formula LEF, SAE 5W-30	Meets: ACEA A5/B5/C2, API SL/CF
1208	Gulf Formula RNX, SAE 5W-30	Meets: ACEA C4, Approved: Renault RN 0720
1209	Gulf Formula FS, SAE 5W-30	Meets: ACEA A5/B5, Ford M2C 913C
1210	Gulf Formula G, SAE 5W-40	Meets: ACEA A3/B4, VW 502.00/505.00 Approved: API SM/CF, MB 229.3
1211	Gulf Max Supreme, SAE 5W-30	Approved: API SM & ILSAC GF-4
1212	Gulf Formula FE, SAE 0W-30	Meets: ACEA A5/B5, VW 503.00/506.00/506.01
1213	Gulf Formula G, SAE 0W-30	Meets: ACEA A3/B4, VW 502.00/505.00/503.01, MB 229.3 Approved: API SJ/CF, BMW Longlife 98,
1214	Gulf Formula FE, SAE 5W-30	Meets: ACEA A1/B1, FORD M2C913-A/M2C913-B
1215	Gulf Formula XLE, SAE 5W-30	Meets: ACEA A3/B4/C3, API SM Approved: MB 229.31, BMW Longlife-04
1217	Gulf Formula G, SAE 5W-30	Meets: ACEA A3/B4 Approved: API SL/CF , MB 229.3, VW 502.00/505.00, BMW Longlife-98
1218	Gulf Formula GMX, SAE 5W-30	Meets: ACEA A3/B4 Approved: API SL/CF, VW 502.00/505.00, Daimler MB 229.5 & approved in accordance with: GM LL-A-025 / LL-B-025.
1220	Gulf Formula ULE, SAE 5W-30	Meets: ACEA A3/B4/C3, API SL/CF Approved: MB 229.51, BMW Longlife-04, aVW 502.00/505.00/505.01
1221	Gulf Formula ULE, SAE 5W-40	Meets: ACEA A3/B4/C3. Approved: API SM/CF, BMW Longlife-04, VW 502.00/505.00/505.01, MB 229.51, Porsche (except Cayenne V6)
1222	Gulf Formula GX SAE 5W-40	Meets: ACEA A3/B4, GM-LL-B-025, Renault RN 0700/0710, Porsche 040 Approved: API SM/CF, BMW Longlife-01, MB 229.5, VW 502.00/505.00
1224	Gulf TEC Plus, SAE 5W-40	Meets: ACEA A3/B3 Approved: API SL/CF, MB 229.1, VW 505.00/505.01
1240	Gulf TEC Plus, SAE 10W-40	Meets: ACEA A3/B4, VW 505.00 Approved: API SL/CF, MB 229.1
1320	Gulf MAX Plus, SAE 15W-40	Meets: ACEA A3/B3, VW 505.00 Approved: API SL/CF, MB 229.1
1330	Gulf Multi G, SAE 15W-40	Meets: API CD/SF
1335	Gulf Multi G, SAE 20W-50	Meets: API CD/SF
1350	Gulf MAX Plus, SAE 20W-50	Meets: ACEA A3/B3, VW 505.00 Approved: API SL/CF, MB 229.1
1393	Gulf Single G, SAE 30	Meets: API SF
1395	Gulf Single G, SAE 50	Meets: API SF



Heavy Duty Diesel Engine Oils

A well-known strength of the Gulf product range is the comprehensive set of engine oils for commercial road-transport customers all over the world. Gulf has recently revised the engine and transmission-oil product-range, and now has a product for virtually every truck, bus or other heavy-duty road vehicle on the road today. Many of these oils have been formally approved by, leading engine manufacturers such as Mercedes Benz, Volvo, Scania, Renault, MAN, MTU, Cummins, Detroit Diesel and Mack.



Gulf Fleet Force Synth 5W-30

Productcode: 1510

Gulf Fleet Force Synth 5W-30 is an extra-high performance synthetic heavy-duty diesel-engine oil developed to meet the requirements of modern European engines meeting Euro IV emission norms. Gulf Fleet Force Synth 5W-30 is formulated with premium quality synthetic base fluids and advanced additive technology to offer superior engine protection and significantly extended drain intervals. This oil meets the latest ACEA E7 & ACEA E4 specifications and is suitable for heavy-duty applications, extending service-life in most modern European vehicles.

Gulf Fleet Force Synth 5W-30 is suited for all turbocharged and naturally-aspirated diesel engines used in on-road applications, mining, construction and other off-highway applications and for the latest heavy-duty diesel vehicles not employing diesel particulate filters operating in very low ambient temperatures.

Gulf Fleet Force Synth 5W-30 is suitable for engines that use Exhaust Gas Recirculation.

Gulf Superfleet ELD 10W-40

Productcode: 1520

Gulf Superfleet ELD 10W-40 is an extra-high performance, synthetic diesel engine oil developed to provide outstanding protection to modern high-performance diesel engines used in heavy-duty situations. Gulf Superfleet ELD 10W-40 is formulated with high-performance base stocks and advanced additives, to provide excellent lubrication and 'Extra Long Drain' intervals.

Gulf Superfleet ELD 10W-40 is recommended for use in all low-emission turbocharged and naturally-aspirated heavy-duty diesel engines by European & Japanese manufacturers and is also suitable for on road applications including light- & heavy-duty highway and urban applications, mining-, construction-, agricultural and other off-road applications. Depending on the specific model and service conditions, oil change intervals of 100.00 km can easily be achieved.

Gulf Superfleet XLE SAE 10W-40 Productcode: 1530

Gulf Superfleet XLE 10W-40 is an extra-high performance, fully synthetic, diesel engine oil exclusively designed for the new generation, high-performance, low-emission engines used in heavy-duty on-highway applications. Gulf Superfleet XLE 10W-40 is formulated using the highest quality base fluids, providing outstanding high-temperature viscosity retention, low-temperature fluidity, volatility control and fuel economy improvement. The latest low SAPS (Sulphated Ash, Phosphorus, Sulphur) additive chemistry used in Gulf Superfleet XLE 10W-40 is used to maintain the efficiency of the emission-reduction systems, such as Diesel Particulate Filter (DPF).

Gulf Superfleet XLE 10W-40 is recommended for highly-rated diesel engines meeting Euro IV & V and earlier emission norms and running under very severe conditions. With extended drain intervals it is suitable for EGR engines with or without particulate filters, and for engines fitted with SCR NOx reduction systems. Gulf Superfleet XLE 10W-40 is strongly recommended for engines fitted with particulate filters, and is designed for vehicles running on low-sulphur diesel fuel. (max. 50 ppm)

Gulf Superfleet Supreme 10W-40 Productcode: 1535

Gulf Superfleet Supreme 10W-40 is an extra-high performance, semi-synthetic, heavy-duty diesel engine oil specifically developed for use in modern, low-emission diesel engines, including those fitted with Exhaust Gas Re-circulation (EGR) systems. Gulf Superfleet Supreme 10W-40 meets the latest requirements of all major European, American and Japanese engine manufacturers and offers exceptional protection and extended life to diesel engines operating on low- or high-sulphur diesel. Gulf Superfleet Supreme 10W-40 is blended from selected base stocks and new generation performance additives.

Gulf Superfleet Supreme 10W-40 is suitable for turbocharged and naturally-aspirated diesel engines used in on-highway applications, including those fitted with EGR systems and meeting US 2004 emission norms. It is also suitable for Euro IV vehicles that do not require low SAPS (Sulphated Ash, Phosphorous, Sulphur) oils (i.e. are not fitted with Diesel Particulate Filters), and also for vehicles meeting Euro III and earlier emission norms and for heavy-duty diesel engines used in mining, construction, agriculture & other off-highway applications. For mixed fleet applications and gasoline engines we recommend SAE 15W-40 oil.

Gulf Supreme Duty XLE 10W-30 Productcode: 1531

Gulf Supreme Duty XLE 10W-30 is an extra-high performance diesel engine oil specifically developed for use in modern, high-output, low-emission engines meeting Euro IV & V & US 2007 highway exhaust emission standards. Gulf Supreme Duty XLE 10W-30 not only addresses the unique needs of these new engines and enhances the life of exhaust after-treatment devices, but also provides improved protection to older engines. Gulf Supreme Duty XLE 10W-30 is formulated with state-of-the-art additive technology and highly hydro-processed base oils to provide outstanding performance and overall protection. Gulf Supreme Duty XLE 10W-30 exceeds the performance requirements of API CJ-4/ SM service categories and is approved by major global OEMs like Volvo, Mack, Cummins, etc.

Gulf Supreme Duty XLE 10W-30 is suitable for the latest high-performance low-emission engines including those equipped with DPFs and Exhaust Gas Recirculation (EGR). Also suitable for on-road vehicles and off-road equipment operating under severe low speed/heavy load conditions using ultra low (10 ppm) sulphur fuels, and for high-performance gasoline engines and mixed fleet operations requiring oils meeting API CJ-4 / SM performance levels.

Gulf Superfleet Special 15W-40 Productcode: 1561

Gulf Superfleet Special 15W-40 is a high-performance heavy-duty diesel engine oil developed to meet the performance requirements of modern turbocharged and naturally-aspirated diesel engines operating under severe conditions. Gulf Superfleet Special 15W-40 is blended from highly refined base stocks and proven multifunctional additives to provide excellent performance and long drain intervals. Gulf Superfleet Special 15W-40 meets the requirements of an array of heavy-duty diesel engines used in variety of applications.

Gulf Superfleet Special 15W-40 is suitable for turbocharged and naturally-aspirated diesel engines of all major global engine manufacturers meeting Euro II and Euro I emission norms as well as for on-highway light- and heavy-duty trucking including high speed-high load service and short haul pick-up/delivery vans. Also suitable for heavy-duty diesel engines used in mining, construction, agriculture and other off-highway applications.

Heavy Duty Diesel Engine Oils

Code	Product name	Specifications
1510	Gulf Fleet Force Synth SAE 5W-30	Meets: ACEA E7/E4/B4, API CF, Mack EO-M Plus, Renault Trucks RXD, Volvo VDS-3, Cummins CES 20076/77/78 Approved: API CI-4, MAN M3277, MB 228.5, MTU Type 3
1512	Gulf Fleet Force Synth SAE 10W-40	Meets: ACEA E7/E4, API CF, Cummins 20072, MAN M3277, MB 228.5, MTU Type 3
1520	Gulf Superfleet ELD SAE 10W-40	Meets: ACEA E7/E4, MTU Oil Cat.3, Renault Trucks RXD/RLD-2 Approved: API CI-4/CF, MB 228.5, MAN M3277, Volvo VDS-3
1525	Gulf Superfleet XLD SAE 10W-40	Meets: ACEA E7/E4, MTU Oil Cat.3, Mack EO-M Plus, Renault Trucks RXD/RLD-2, DAF Extended Drains, Cummins CES 20077/78 Approved: API CI-4, MAN M3277, MB 228.5, Scania LDF-2, Volvo VDS-3
1530	Gulf Superfleet XLE SAE 10W-40	Meets: ACEA E6/E7, Renault Trucks RXD, Volvo VDS-3, Deutz DQC III-05. Approved: MB 228.51, MAN M3277CRT™ / M3477 and MTU Type 3
1531	Gulf Supreme Duty XLE SAE 10W-30	Meets: ACEA E9, MAN M3275, CAT ECF 3/2/1a, MB 228.31, MTU Oil Category 2.1 Approved by: API CJ-4/SM, Volvo VDS-4, Renault VI RLD-3 compliance, Cummins CES 20081
1533	Gulf Supreme Duty XLE SAE 15W-40	Meets: ACEA E9/E7, CAT ECF 3/2/1a, MTU Oil Category 2.1 Approved: API CJ-4/SM, Volvo VDS-4, Mack EO-O Premium Plus, MB 228.31, MAN M3275, Renault VI RLD-3 compliance, Cummins CES 20081, DDC PGOS 93K218
1535	Gulf Superfleet Supreme SAE 10W-40	Meets: ACEA E7, Mack EO-M Plus, Caterpillar ECF-1. Approved: API CI-4, MB 228.3, MAN M3275, MTU Type 2, Volvo VDS-3, Cummins CES 20077/20078, Renault Trucks RLD-2, Scania LDF-2
1540	Gulf Superfleet Supreme SAE 15W-40	Meets: ACEA E7, A3/B4, Renault Trucks RLD, Mack EO-M Plus Cummins 20071/72/76/77/78. Approved: CI-4/SL, MB 228.3, MAN M3275, Volvo VDS-3, MTU Type 2
1549	Gulf Superfleet LE SAE 10W-30	Meets: API CH-4/CF, ACEA E7, Renault Trucks RD/RD-2, MB 228.3, MAN M3275, Volvo VDS-2, Caterpillar ECF 1-a, Mack EO-M Plus Cummins CES 20076/20077/20078
1550	Gulf Superfleet LE SAE 15W-40	Meets: ACEA E5, A3/B4, Renault VI RLD, Mack EO-M Plus, Volvo VDS-2, Cummins CES 20076/20077, Caterpillar ECF-1, Allison C-4. Approved: API CH-4/SL, MB 228.3, MAN M3275, MTU Type 2
1561/ 1562	Gulf Superfleet Special SAE 15W-40/ SAE 20W-50	Meets: ACEA E3/A3/B4, API CG-4/CF/SL, MAN M3275, MB 228.2/228.3/229.1, Volvo VDS-2, Renault RD/RD 2, Mack EO-L, MTU Type 2
1681/1682	Gulf Super Duty CF SAE 10/SAE 20W-20	Meets: API CF/SF Gulf Super Duty CF 30 & 40 API CF approved.
1683/1684	SAE 30/SAE 40	
1685	SAE 50	
1094	Gulf Flushing Oil	





Automotive Gear and Transmission Oils

A range of oils for automatic and manual gear boxes, both with and without synchromesh. Gulf also offers products for the differential rear drive, including off-set hypoid differential boxes. Both applications can now be lubricated with a single oil using Gulf's new Total Driveline gear-oil products.

Gulf Gear EP Oils

Gulf Gear EP is a series of high-performance gear lubricants designed to provide effective lubrication in a wide range of automotive transmissions and axle drives where API GL-4 quality oils are specified. Gulf Gear EP is formulated from high-quality base stocks and balanced extreme-pressure additives so as to provide protection to gear components against wear and scoring. Gulf Gear EP offers protection against oxidation, degradation, rust and corrosion. Gulf Gear EP meets API GL-4 and US MIL-L-2105 specifications for automotive gear oils.

Gulf Gear EP is suitable for manual transmissions and transaxles compliant with API GL- 4, and on-road passenger cars, light- and heavy-duty trucks, buses and vans. Also for off-highway equipment in construction, mining and agriculture. Other applications involving spiral bevel gears operating under moderate to high speeds, or loads and axles with hypoid gears operating under mild to moderate speeds and loads.

Gulf Gear TDL Oils

Gulf Gear TDL is a thermally-stable total driveline gear lubricant designed to meet the severe requirements of drive trains in light- and heavy-duty commercial vehicles. Gulf Gear TDL is blended from premium quality base stocks and advanced performance additives to provide excellent protection to drive train components, improved gear shifting and enhanced synchroniser protection. Gulf Gear TDL provides reliable protection against thermal and oxidation degradation, rust & corrosion and good low temperature fluidity.

Gulf Gear TDL is suited for applications requiring one single lubricant for rear axles, synchronized and non-synchronized manual transmissions, drive trains requiring oils meeting MAN M3343 Type M or Scania STO 1:0, on-road and off- highway transmission applications. Gulf Gear TDL is NOT recommended for automatic transmissions and limited-slip differentials.

Gulf Syngear Oils

Gulf Syngear oil is a fully synthetic, thermally-stable, total driveline gear-lubricant designed to meet the demanding requirements of light- and heavy-duty commercial vehicles and off-highway equipment operating in most severe operating conditions. Gulf Syngear is blended from synthetic base fluids and advanced technology additive system to provide unmatched protection for extended durability of driveline components. Gulf Syngear has outstanding load-carrying capability and high viscosity index to provide effective lubrication in applications encountering high-speed/shock load and low-speed/ high torque conditions. The wide temperature range and the excellent low-temperature fluidity improves fuel economy. Gulf Syngear exceeds Scania STO 1:0 requirements and other worldwide industry specifications.

Gulf Syngear is recommended for rear-axels, synchronised and non-synchronised manual transmissions requiring a single lubricant as well as drive trains requiring oils compliant with MAN 3343 Type S & Scania STO 1:0. Also for on-road and off-road transmission applications. Gulf Syngear is NOT recommended for automatic transmissions and limited-slip differentials.

Gulf Gear MP Oils

Gulf Gear MP series comprises high performance gear lubricants designed to provide excellent lubrication in a wide range of automotive transmissions, axles and final drives. Gulf Gear MP series is formulated from high quality base stocks and balanced extreme pressure additives to protect gear components in applications where extreme pressures and shock loading are encountered. Gulf Gear MP offers effective protection against oxidation degradation, rust and corrosion.

Gulf Gear MP is suitable for heavy duty non-synchronized manual transmissions, axles and final drives where API GL-5 quality oils are required. Suitable for passenger cars, light and heavy duty trucks, buses and vans, as well as off-highway equipment in construction, mining and agriculture. Also suitable for heavy-duty applications involving hypoid and other gears operating under extreme conditions, like high speed/shock load, high speed/low torque and/or low speed/ high torque . NOT recommended for automatic transmissions.

Gulf Multi Vehicle ATF

Productcode: 2460

Gulf Multi-Vehicle ATF is a synthetic fluid exclusively designed with advanced multi-vehicle additive technology to serve a broad range of vehicles by removing the limitations of conventional Dexron® III/ MERCON® multi-vehicle formulations. Gulf Multi-Vehicle ATF meets or exceeds the complex requirements of Automatic Transmission/ Vehicle Manufacturers in Europe, North America and Asia including the JASO 1-A performance standard of the Japanese Automobile Manufacturers Association.

Gulf Multi-Vehicle ATF is suitable for automatic transmissions in North American cars & trucks, and specifically meets Chrysler ATF+3/4, Dexron® III and MERCON® V quality standards. Also suitable for European and Asian vehicles such as Audi, BMW, Chrysler, Daimler, Ford, Honda, Hyundai, Jaguar, KIA, MAN, Mazda, Mitsubishi, Nissan, Subaru, Suzuki, Toyota, Volkswagen & Volvo and others as appropriate and for automatic transmissions by Aisin-Warner, Allison, Voith, ZF and others.

Note : NOT suitable for use in Continuously Variable Transmissions (CVT), Dual Clutch Transmission (DCT), Ford Type F/G, Daimler MB 7 speed (NAG 2), ZF 6 Speed.

Gulf MERCON® V ATF

Productcode: 2507

Gulf MERCON®V ATF is a premium automatic transmission fluid recommended for, and meets the warranty requirements of all vehicles of Ford requiring MERCON® V quality fluids and for a broad range of vehicles from various OEMs. This synthetic automatic transmission fluid with its advanced additive technology offers superior and well-balanced performance and provides excellent oxidation resistance, wear protection, friction durability and seal compatibility. It is approved as service-fill fluid according to Ford MERCON® V (license number: M5090104) specifications. It also meets the performance requirements of Allison C-4 Powershift transmissions and JASO 1-A specifications and is suitable for use in various applications as listed in the table.

Note : Not suitable for use in Continuously Variable Transmissions (CVT), Dual Clutch Transmission (DCT), Ford Type F/G, Daimler MB 7 speed (NAG 2), ZF 6 Speed.



Automotive Gear and Transmission Oils

Code	Product name	Specifications
2214	Gulf Gear EP Serie SAE 85W-140	Meets: API GL-4, US Army MIL-L-2105
2289	SAE 80W-90	
2253	Gulf Gear MZ SAE 80W	Meets: API GL-4, , US Army MIL-L-2105 Approved: MAN 341 Type Z-2, MB 235.5, ZF TE-ML 02B/17A
2255	Gulf Gear XP SAE 80W-90	Meets: API GL-4, US Army MIL-L-2105, ZF TE-ML 08 Approved: MAN 341 Type Z-1, ZF TE-ML 02A/16A/17A/19A
2314	Gulf Gear MP Serie SAE 85W-140	Meets: API GL-5, US Army MIL-L-2105D
2389	SAE 80W-90	
2331	Gulf Gear LS SAE 80W-90	Meets: API GL-5/MT-1, US Army MIL-PRF-2105E, Mack GO-J
2350	Gulf Gear DB SAE 85W-90	Meets: API GL-5, US Army MIL-L-2105D Approved: MB 235.6, ZF TE-ML-05A/16C/17B/19B/21A
2365	Gulf Gear TDL SAE 80W-90	Meets: API GL-5/MT-1, MIL-PRF-2105E, MB 235.0, SAE J2360, DAF, Eaton, Mack GO-J, Renault, Volvo 97310, ZF TE-ML 07A/08/16C/D Approved: MAN M 3343 Type M, Scania STO 1:0 (Gearbox), ZF TE-ML 02B/05A/12E/16B/17B/19B/21A
2370	Gulf Gear TDL SAE 85W-140	Meets: API GL-5/MT-1, MIL-PRF-2105E, SAE J2360, Eaton, DAF, Mack GO-J, MAN M 3343 Type M, Iveco(Axle), ZF TE-ML 05A/07A/08/12E/16C/D/19B Approved: Scania STO 1:0 (Gearbox & Axle Oils)
2375	Gulf Gear TX SAE 75W-80	Meets: API GL-4, MAN 341 Type Z3, Volvo 97305, Renault (in acc. RNT B0032/2 Annex 3), DAF (ZF transmissions), Eaton (Europe) S-series (300.000 km or 3 years) Iveco (ZF transmissions) Approved by: ZF TE-ML 02D
2379	Gulf Syngear SAE 75W-90	Meets: API GL-5/MT-1, US Army MIL-PRF-2105E, SAE J 2360, Mack GO-J, ZF TE-ML 07A/08, Arvin Meritor 076-N, DAF, Eaton, Iveco. Approved: MAN 3343 Type S, Scania STO 1:0 (Gearbox Oil) ZF TE-ML-02B/05B/12B/16F/17B/19C, MB 235.8
2381	Gulf Syngear SAE 75W-140	Meets: API GL-5/MT-1, US Army MIL-PRF-2105E, SAE J 2360, Mack GO-J Approved: Scania STO 1:0 (Gearbox & Axel gears)
2510	Gulf HT Fluid TO-4 Serie SAE 10W	Meets: Caterpillar TO-4, Allison C-4, Komatsu KES 07.868.1
2530	SAE 30	ZF TE-ML 03, API CF / CF-2
2550	SAE 50	

Automatic Transmission Fluids

Code	Product name	Specifications
2460	Gulf Multi-Vehicle ATF	Meets: Aisin Warner JWS 3309, Allison C-4 Audi G 052 025-A2/ G-052-162-A1 BMW (AE) LT 71141-ZF 5 Speed/7045E (3 Series) ETL-8072B (BMW 5 Series), LA2634 Chrysler ATF+3/ATF+4 Daimler MB 236.1/236.2/236.5 /236.6/236.7/236.9/236.10 (NAG-1, MB 5 Speed 1996-2006), MB 236.11 (LT 71141) Ford FNR5, MERCON®/MERCON®V GM DEXRON®/ DEXRON®II/IIID/ DEXRON®IIIG/H, Honda ATF-Z1, Hyundai SP-II/SP-III, JATCO 3100 PL085 (Idemitsu K17 – Jaguar X Type 2001-2005), JASO 1-A, KIA SP-II/SP-III, Mazda ATF-MIII/MV, MAN 339 V1, 339 V2, 339 Z1, 339 Z2 Mitsubishi Diamond SP-II/SP-III Nissan Matic-D, J, K, S, N402 (JATCO FWD Daimler in Nissan, Rover 800, VW Polo), Subaru ATF-HP Toyota T-III/T-IV, Volvo 97340/97341 Voith 55.6335.XX (G607), 55.6336.XX (G1363) VW G 052 025-A2/G-052-162-A1/TL52162 ZF TE-ML 02F/03D/04D/05L/09/11B/14A/14B, 16L, 17C
2502	Gulf ATF DX II	Meets: General Motors DEXRON®IID Approved: ZF TE-ML 02F / 04D
2503	Gulf ATF DX III	Meets: General Motors DEXRON®III G, Ford MERCON®
2504	Gulf ATF DX III H	Meets: General Motors DEXRON®III H, Ford MERCON®
2505	Gulf ATF Synth	Meets: General Motors DEXRON®IIE, Ford MERCON®, MB 236.8 Allison C-4, Voith G 1363 (extended drain), Caterpillar TO-2, ZF TE-ML 09/14B/16M
2507	Gulf MERCON® V ATF	Meets: Allison Transmission Division's C-4, JASO 1-A Approved by Ford > MERCON®V (M5090104)
2508	Gulf ATF Type F	Meets: Ford ESW-M2C33-F
2509	Gulf DEXRON® VI ATF	Approved: General Motors > DEXRON®VI (J-60304 & J-60311)
2541	Gulf ATF Type A	General Motors Type A Suffix A





Brake/Clutch Fluids Coolant & Anti Freeze

Brake/clutch, coolant and anti-freeze fluids are necessary for the good function of all engines. All Gulf's fluids offer the full protection for your gasoline or diesel engines. Maximise the life of your engines using our high performance fluids.

Gulf Super Brake Fluid DOT 4

Productcode: 6404

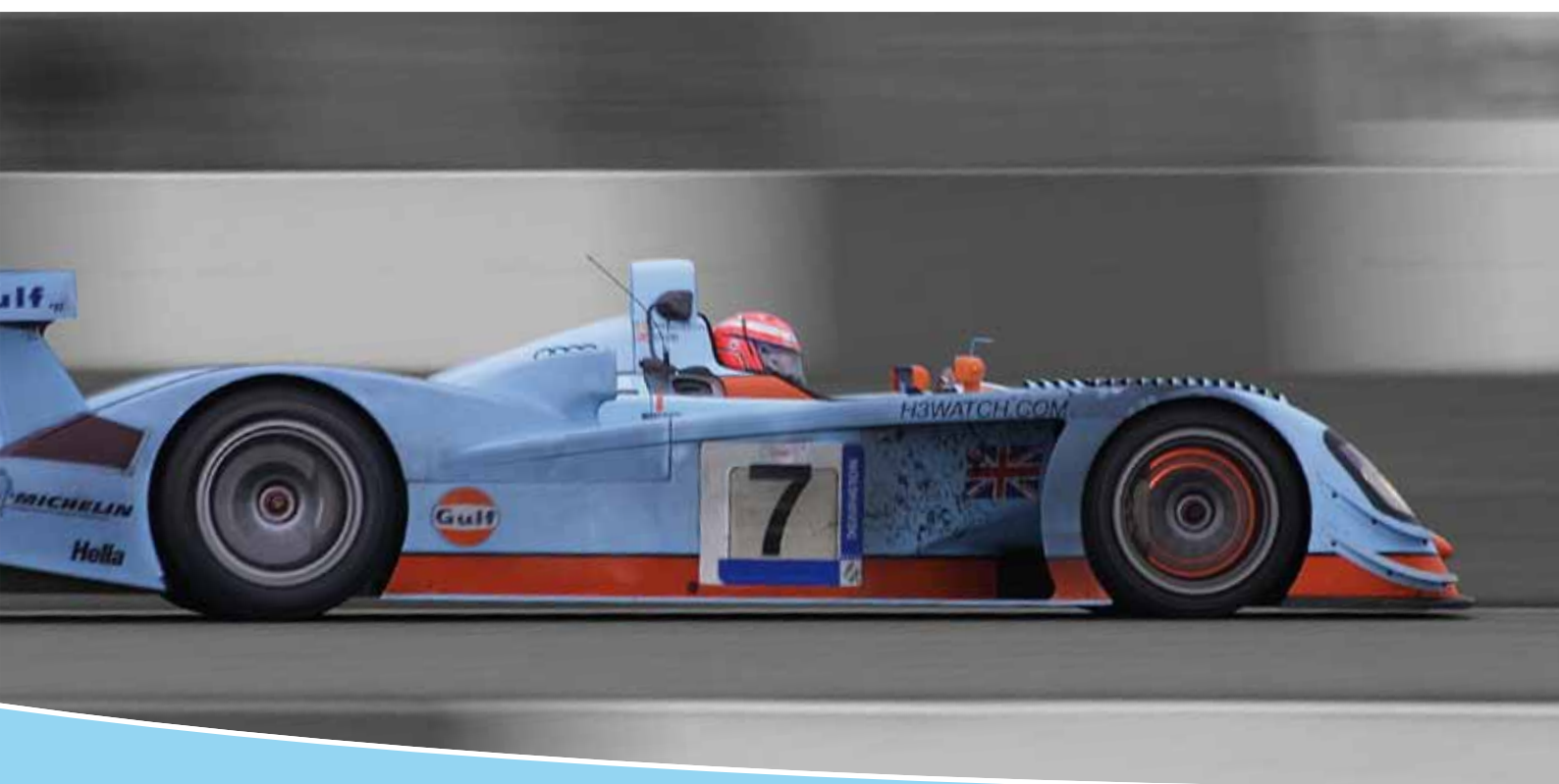
Gulf Super Brake Fluid DOT 4 is a high-performance polyglycol-based brake fluid specially designed for use in the disc-, drum- & anti-locking brake systems (ABS) of any commercial vehicle, passenger car or motorcycle operating under moderate to severe conditions and requiring a DOT 4 type of fluid. Thanks to its higher boiling point Gulf Super Brake Fluid DOT 4 reduces the impact of moisture absorption and provides reliable braking performance. Gulf Super Brake Fluid DOT 4 contains oxidation- and corrosion-

inhibitors to resist oxidation at the high temperatures encountered in disc braking systems and to provide superior corrosion-protection for metallic components in the brake system. Low-temperature fluidity ensures trouble free operation.

Gulf Super Brake Fluid DOT 4 is compatible with all seals and metals used in conventional braking systems requiring polyglycol brake fluids.

Brake/Clutch Fluids

Code	Product name	Specifications
6404	Gulf Super Brake Fluid DOT 4	FMVSS 116 DOT 3 & DOT 4, SAE J 1703, ISO 4925
6405	Gulf Racing Brake Fluid	FMVSS 116 DOT 3 & DOT 4 & DOT 5.1, SAE J 1703, ISO 4925
6410	Gulf LHM Fluid	ISO 7308, PSA B 71 2710



Gulf Antifreeze is a modern 'British-Standard Coolant' composed of Mono Ethylene Glycol with additives to ensure good protection of all hard metals in the cooling system and engine. Gulf Antifreeze is safe for gaskets and hoses and has good resistance to foaming.

Gulf Antifreeze can be used throughout the year in all cooling systems of gasoline- and diesel-engines. A top-rated product thanks to the balanced additives package and high quality Mono Ethylene Glycol formulation. Gulf Antifreeze needs be diluted with water according to the instructions before use.

Antifreeze (concentrates)

Code	Product name	ΔT 50%	Specifications
6900	Gulf Antifreeze	-36 °C	ASTM D3306, AFNOR 15-601 BS 6580, CUNA NC956-16, SAE J 1034
6901	Gulf Antifreeze LL	-38 °C	ASTM D3306, AFNOR 15-601, BS 6580, CUNA NC956-16, MTU, SAE J 1034, MB 325.2, GM/OPEL, DEUTZ MWM, BMW, MaK, VW TL 774C (G11)
6902	Gulf Antifreeze XLL	-40 °C	BS 6580, MTU, SAE J 1034, MB 325.3, MAN 248&324, FORD ESDM-97B49A, GM/OPEL 1940656/6277M, PSA B7 15110, DAF/LEYLAND LTS 22AF10, JOHN DEERE H24B1&C1, VW TL 774D/F (G12+)

Gulf Coolant XLL (ready to use)

Productcode: 6939

Gulf Coolant XLL is a silicate-free coolant, based on Mono Ethylene Glycol with addition of special additives. Gulf Coolant XLL has extremely powerful organic corrosion inhibitors resulting in an extended life for the radiator, pump and pipes. Gulf Coolant XLL has a high boiling point, which decreases the risk of overheating. The coolant offers extra protection during hot summers and heavy-duty operating conditions. Gulf Coolant XLL has good compatibility with seals and is completely compatible with elastomers used by European constructors. Excellent stability with hard water, is achieved because Gulf Coolant XLL doesn't contain silicates or

other mineral salts. Gulf Coolant XLL prevents the formation of deposits and scaling, and can be mixed with other coolants based on Mono Ethylene Glycol.

Gulf Coolant XLL is a new generation silicate-free coolant, and because of its high quality, is already used as a first-fill by more than 75% of automobile manufacturers. Gulf Coolant XLL was developed to meet demand for a fully organic coolant, which lasts the entire life-time of the engine. This special coolant needs to be used undiluted.

Cooling Fluids (ready to use)

Code	Product name	ΔT	Specifications
6936	Gulf Coolant 40	-36 °C	ASTM D3306, AFNOR 15-601, BS 6580, CUNA NC956-16, SAE J 1034
6938	Gulf Coolant LL	-38 °C	ASTM D3306, AFNOR 15-601, BS 6580, CUNA NC956-16, MTU, SAE J 1034, MB 325.2, GM/OPEL, DEUTZ MWM, BMW, MaK, VW TL 774C (G11)
6939	Gulf Coolant XLL	-40 °C	BS 6580, MTU, SAE J 1034, MB 325.3, MAN 248&324, FORD ESDM-97B49A, GM/OPEL 1940656/6277M, PSA B7 15110, DAF/LEYLAND LTS 22AF10, JOHN DEERE H24B1&C1, VW TL 774D/F (G12+)

FMVSS = Federal Motor Vehicle Safety Standard (USA)

DOT = Department of Transport (USA)



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Small Engine Oils 2- & 4 stroke

Gulf 2-, and 4-stroke small engine oils are developed specifically to meet the special requirements of the latest high-performance 2- and 4-stroke motorcycles. It is blended from premium quality base stock and advanced additive technology to exceed the most-demanding lubrication requirements. It provides excellent protection to engine, gearbox and wet clutch.

Gulf Syntac 4T 5W-40

Productcode: 1296

Gulf Syntac 4T 5W-40 is a synthetic, 4-stroke gasoline engine oil developed specifically to meet the special requirements of latest high performance air-cooled 4-stroke motorcycles. Gulf Syntac 4T 5W-40 is blended from premium quality base stocks and advanced additive technology to exceed the most demanding lubrication requirements of modern 4-stroke motorcycles. Gulf Syntac 4T 5W-40 provides excellent protection to the types of engine, gearbox and wet clutch used in 4-stroke motorcycles and ensures the highest degree of reliability, even under severe operating conditions. It is suitable for a wide range of ambient temperatures. Gulf Syntac 4T 5W-40 exceeds the specifications of API SL and JASO MA/MA2 and meets the requirements of leading global 4-stroke motorcycle manufacturers.

Gulf Syntac 4T 5W-40 is recommended for advanced 4-stroke gasoline engines in high-performance motorcycles by leading global manufacturers and works in a wide range of ambient temperatures.

Gulf Power Trac 4T 10W-40

Productcode: 1298

Gulf Power Trac 4T 10W-40 is a semi-synthetic, 4-stroke gasoline engine oil developed specifically to meet the special requirements of latest high-performance air-cooled 4-stroke motorcycles. Gulf Power Trac 4T 10W-40 is blended from premium quality base stocks and uses advanced additive technology to exceed the most demanding lubrication requirements of modern 4-stroke motorcycles. Gulf Power Trac 4T 10W-40 provides excellent protection for the types of engine, gearbox and wet clutch used in 4-stroke motorcycles and ensures highest degree of reliability even under severe operating conditions.

Gulf Power Trac 4T 10W-40 is suitable for a wide range of ambient temperatures. Gulf Power Trac 4T 10W-40 exceeds the specifications of API SL and JASO MA, and the requirements of leading global 4-stroke motorcycle manufacturers.

Gulf Syntac 2T

Productcode: 1900

Gulf Syntac 2T is a supreme-performance synthetic lubricant specially developed for high-output air-cooled 2-stroke gasoline engines. Gulf Syntac 2T's unique formulation is based on synthetic base fluids and advanced performance additives ensuring excellent engine protection, cleanliness and low smoke even under extreme operating conditions. Gulf Syntac 2T exceeds the latest international specifications of JASO FD, ISO-L-EGD & API TC and the requirements of leading global 2-stroke motorcycle/ scooter manufacturers.

Gulf Syntac 2T is recommended for high-powered 2-stroke motorcycles/ scooters operating under diverse conditions. Suitable for oil-injection and premix lubrication systems; (following the manufacturer's recommendations for oil-fuel ratio). Suitable for high performance 2-stroke engines in all terrain vehicles, snow mobiles, lawn mowers and a variety of applications requiring oils of this quality and also recommended for applications specifying ISO-LEG/ JASO FC or lower category oils for superior performance.

2- & 4 Stroke Motorcycle Oils

Code	Product name	Specifications
1296	Gulf Syntac 4T SAE 5W-40	Meets: API SL/JASO MA Approved: JASO MA2
1298	Gulf Power Trac 4T SAE 10W-40	Meets: API SL/JASO MA
1300	Gulf Pride 4T SAE 20W-50	Meets: API: SG, JASO: MA
1900	Gulf Syntac 2T	Meets: API TC, JASO FD ISO 6743-15 EGD
1910	Gulf Pride 2T Plus	Meets: API TC, ISO 6743-15 EGD Approved by: JASO FD
1940	Gulf Pride 2T	Meets: API TC, JASO FB ISO 6743-15 EGB
1960	Gulf Green 2T	Meets: API TC, JASO FC ISO 6743-15 EGC



Gulf Snowmobile 2T Syn

Productcode: 1904

Gulf Snowmobile 2T Syn is a supreme-performance fully synthetic lubricant specially developed for high-output air- & liquid-cooled 2-stroke gasoline engines. Gulf Snowmobile 2T Syn's unique formulation based on synthetic base fluids and advanced performance additives, ensuring excellent engine protection, cleanliness and low smoke even under extreme operating conditions.

Gulf Snowmobile 2T Syn is recommended for high-powered 2-stroke snowmobile-engines operating under diverse conditions. Gulf Snowmobile 2T Syn is suitable for oil-injection and premix lubrication systems; (always following the manufacturer's recommendations for fuel-oil ratio). Gulf Snowmobile 2T Syn is suitable for high-performance 2-stroke engines in all terrain vehicles, snowmobiles, lawnmowers and other variety of applications requiring oils of this quality.

2- & 4 Stroke Snowmobile Engine Oils

Code	Product name	Specifications
1302	Gulf Snowmobile 4T Syn SAE 5W-40	Meets: API SL
1904	Gulf Snowmobile 2T Syn	Meets: API TC, ISO 6743-15 EGD, JASO FD
1944	Gulf Snowmobile 2T	Meets: API TC, JASO FB

Gulf Pride 3000

Productcode: 1981

Gulf Pride 3000 is a high-performance, ashless, 2-cycle engine oil developed to meet the most critical requirements of modern water-cooled outboard engines. Gulf Pride 3000 is designed for the harsh operating conditions of the marine environment. Gulf Pride 3000 is certified by NMMA according to their latest specification, NMMA TC-W3® (certification number- RL-92002B). The advanced ashless additive technology used in Gulf Pride 3000 provides excellent lubricity and protection against wear & rust.

Also recommended for 2-cycle, water-cooled outboard engines where NMMA TC-W2®, NMMA TC-W® or other general purpose lubricants are required. Gulf Pride 3000 is suitable for adding as a premix with gasoline, or injecting through variable-ratio oil-injection systems.

Gulf Pride 4004

Productcode: 1982

Gulf Pride 4004 in SAE 10W-40 is a premium quality 4-cycle engine oil specially developed for the most modern high-output gasoline-powered, water-cooled outboard-, inboard/outboard- and personal-watercraft engines. Gulf Pride 4004 is specially developed to exceed the performance requirements of the National Marine Manufacturers Association's specification NMMA FC-W® (Four-Cycle Water Cooled engine specification). It is certified by NMMA according to their specification, NMMA FC- W® (certification number FB-42007H). This high quality oil is designed for the harsh operating conditions of marine environments and it provides excellent lubrication and protection against wear, deposits, rust and corrosion.

Gulf Pride 4004 is recommended for-, and meets the warranty requirements of the following modern high-output gasoline-powered 4-cycle water-cooled engines requiring NMMA FC-W® quality oil.

Outboard Motors: Honda®, Mercury®, Yamaha®, Johnson®/Evinrude®, Bombardier/BRP®, Suzuki®, Nissan®, Tohatsu®. Inboard/Outboard Motors: Mercruiser®, Volvo Penta®, OMC®, Chrysler® Marine, Crusader®, Marine Power®, Chevrolet®, Ford®. Personal Watercraft: Honda®, Yamaha®, Bombardier/BRP® (Sea-Doo®), Polaris®.

2- & 4 Stroke Outboard Engine Oils

Code	Product name	Specifications
1981	Gulf Pride 3000	Approved by: NMMA TC-W3® Certificationnr: RL-92002B
1982	Gulf Pride 4004	Meets: API : SL Approved by: NMMA FC-W® Nr: FB-44303J
1993	Gulf Green 3000	Approved by: NMMA TC-W3® Certificationnr: RL-92000H



Agricultural Oils

For tractors Gulf has multi-functional lubricants for use both in the engine and hydraulic-brake systems. A single fluid for all jobs is a very helpful, avoiding costly mistakes which arise from the use of application-specific fluids. There are also bio-degradable fluids for agricultural and forestry machinery which cause less damage to the environment after fluid spills or leakage.

Gulf Super Tractor Oil Universal

Gulf Super Tractor Oil Universal is a multifunctional tractor lubricant designed for use in a wide variety of modern farm equipment. Gulf Super Tractor Oil Universal is blended from specially selected base stocks and an advanced additive package, to provide reliable performance in a wide range of farming applications. This high-performance Super Tractor Oil Universal is suitable for use in diesel/gasoline engines, conventional gear-drives, powershift transmissions, hydrostatic transmissions, hydraulics, final drives, power-steering systems and oil-immersed brakes working in agriculture.

Gulf Super Tractor Oil Universal multifunctional capabilities makes it suitable for most lubricant applications in farm equipment and reduces inventory and chances of misapplication. Good thermo-oxidative stability and effective detergency/dispersancy controls sludge build-up and deposits leading to cleaner engines. Protects gears, transmissions and bearings against wear, scuffing and pitting. Ensures smooth (jerk free) hydraulic operation. Excellent anticorrosion property protects all working components. Good low temperature property ensures less wear and improved hydraulic response at cold start-up.

Super Tractor Oil Universal

Code	Product name	Specifications
1720	Gulf Super Tractor Oil Universal SAE 10W-30	Meets: API CF-4/CF/SF, API GL-4 Massey Ferguson MF, 1139/1144/1145 John Deere J27C, Ford M2C 159B Allison C-4, ZF TE ML 06B/07B Approved by: Massey Ferguson MF 1145
1730	Gulf Super Tractor Oil Universal SAE 10W-40	Meets: API CF-4/CF/SF, API GL-4 Massey Ferguson MF 1144/1145 Allison C-4, ZF TE ML 06B/07B
1740	Gulf Super Tractor Oil Universal SAE 15W-30	Meets: API CF-4/CF/SF, API GL-4 Massey Ferguson MF 1139/1144/1145 Ford M2C159B, Allison C-4, ZF TE ML 06B/07B
1750	Gulf Super Tractor Oil Universal SAE 15W-40	Meets: API CF-4/CF/SF, API GL-4 Massey Ferguson MF 1144/1145 John Deere J27C, Allison C-4, ZF TE ML 06B/07B

Gulf Universal Tractor Transmission Fluid

Gulf Universal Tractor Transmission Fluid is a high-performance fluid for use in transmissions, hydraulic systems, and oil-immersed brakes of tractors and off-road equipment. Gulf Universal Tractor Transmission Fluid is specially designed for use where a common lubricant reservoir serves transmissions, final drives and hydraulic systems and optimizes the performance of agricultural and industrial tractors.

Gulf Universal Tractor Transmission Fluid meets the specifications of major tractor manufacturers. It is also recommended for road-construction-, quarrying- and agricultural equipment and for Caterpillar powershift transmissions requiring a TO-2 fluid. It can also be used in transmission applications requiring API GL-4 oil though NOT with hypoid gear designs.

Universal Tractor Transmission Fluid

Code	Product name	Specifications
2520	Gulf Universal Tractor Transmission Fluid SAE 80W	API GL-4 Ford M2C86-B/C, M2C134-D, M2C48-B/C, M2C41B, White(Q 1705,1722,1766,1766B,1802,1826 Massey Ferguson 1127A/B, 1129A, M1110, M1135, M1141, M1143, M1145 John Deere J20C, J14 A/B/C, J20D, J21A Allison C-3/C-4, Caterpillar TO-2 Sauer Sunstrand/Danfoss(Hydrostatic Transfluid) J.I.Case MS 1204, 1205, 1206, 1207, 1209, 1210, JIC-143/144/145/185 Denison HF-0, HF-1, HF-2, Kubota UDT Fluid
2522	Gulf Universal Tractor Transmission Fluid SAE 85W	API GL-4 Ford M2C86-B/C, M2C134-D, M2C48-B/C, M2C41B, White(Q 1705,1722,1766,1766B,1802,1826 Massey Ferguson M1110, M1135, M1141, M1143, M1145 John Deere J20C, J14 A/B/C, J20D, J21A Allison C-3/C-4, Caterpillar TO-2 Sauer Sunstrand/Danfoss(Hydrostatic Transfluid) J.I.Case MS 1204, 1205, 1206, 1207, 1209, 1210, JIC-143/144/145/185 Denison HF-0, HF-1, HF-2, Kubota UDT Fluid

Gulf Milking Machine Oil

Gulf Milking Machine Oil is a high-quality oil developed specifically for use in milking machines. Gulf Milking Machine Oil is formulated from specially selected highly-refined mineral oils. Gulf Milking Machine Oil is a non-foaming oil for use in all piston- and rotary milking machine vacuum pumps.

Gulf Milking Machine Oil is suitable for use with a variety of pump designs and for all temperatures and conditions. Gulf Milking Machine Oil is also recommended for the lubrication of associated milk-handling hydraulics and equipment. Gulf Milking Machine Oil should NOT be permitted to come into contact with the milk or food.

Milking Machine Oil

Code	Product name	Specifications
3508-A	Gulf Milking Machine Oil	DIN 51524/2 HLP

Gulf Chain Saw

Gulf Chainsaw Oil is a high-quality oil, based on low aromatic base oils with a special additive package and provides a very great adhesive strength at the chain thereby avoiding oil-loss while providing excellent lubrication properties. Gulf Chainsaw Oil is especially

developed to lubricate the chain of chainsaws so that it does not break or get jammed. Gulf Chainsaw Oils are NOT suitable for the engine of the chainsaw.

Chain Saw Oil

Code	Product name	Specifications
4409	Gulf Chain Saw Oils	ISO VG 100
4410		ISO VG 150
4411		ISO VG 220
4508	Gulf Chain Saw Bio	ISO VG 68



Marine Oils

There is a comprehensive range of Gulf lubricants for marine propulsion engines and other applications. The Gulfmar brand products have been used by ship and ferry operators for many years; trunk piston engines, 2-stroke marine diesel engines and even high-speed diesel engines. These oils are formulated with high-quality base oil and the latest additive systems to meet the requirements of the various engine types and the wide variety of fuels, from standard gas oil through to high-sulphur residual fuel-oil.

Gulfmar Select Plus

Gulfmar Select Plus Oils are premium-quality, multifunctional trunk piston engine oils designed for use in the latest highly-rated medium-speed diesel engines operating on residual fuels in marine, power generation and industrial applications. The advanced sludge control additive technology used in Gulfmar Select Plus Oils meets the ever-increasing demands of medium-speed diesel engines and provides exceptional engine cleanliness and wear protection. Gulfmar Select Plus Oils are available in SAE 30 & 40 viscosity grades with a TBN (Total Base

Number) ranging from 20 to 40. Each grade is denoted by 3 digits in which the first digit indicates the SAE grade (eg. 3 indicates SAE 30 and 4 indicates SAE 40) and the last two digits indicate the TBN. Gulfmar Select Plus Oils exhibit a high degree of water-tolerance

and have better water-separation and base-retention properties. Gulfmar Select Plus Oils are also specially recommended for those engines where oil has a longer life and is infrequently topped-up. Gulfmar Select Plus 340 & 440 (with a TBN of 40) are suitable for the modern low-oil-consumption engines operating on residual fuels which have sulphur content in excess of 3.5%. Gulfmar Select Plus 330 & 430 (with a TBN of 30) are suitable for modern engines operating on residual fuels with sulphur content in excess of 2.5% and less than 3.5 %. Gulfmar Select Plus 320 & 420 (with a TBN of 20) are suitable for the modern engines operating on residual fuels having sulphur content under 2.5 %. Gulfmar Select Plus Oils are also recommended for general lubrication of shipboard equipment where specialised lubricants are not required or where use of API CF quality oils is considered adequate.

Gulfmar Select Plus

Gulfmar Select Plus	320	420	330	430	340	440	355	455
SAE/TBN	30/20	40/20	30/30	40/30	30/40	40/40	30/55	40/55
Product Code	1852	1853	1854	1855	1856	1857	1858	1859

Specifications: Gulfmar Select Plus meets: API CF

Typical Properties:

Density @ 15°C, kg/m ³	897	900	897	900	897	900	897	900
Viscosity @ 100°C, mm ² /s	11.7	15.3	11.7	15.3	11.7	15.3	11.7	15.3
Flash Point, °C	>200	>200	>200	>200	>200	>200	>200	>200
Pour Point, °C	-21	-18	-21	-18	-12	-12	-9	-9

Gulfmar DPO Plus

Gulfmar DPO Plus Oils are a range of premium quality oils for trunk piston diesel engines, designed for use in modern medium-speed diesel engines operating on distillate fuels. The advanced additive technology used in Gulfmar DPO Plus Oils provide excellent engine cleanliness & protection under severe operating conditions. Gulfmar DPO Plus Oils are available in SAE 30 & SAE 40 viscosity grades with a TBN (Total Base Number) of 12 & 15. Each grade is denoted by 3 digits in which the first digit indicates the SAE grade (e.g. 3 indicates SAE 30 and 4 indicates SAE 40) and the last two digits indicate the TBN. Gulfmar DPO Plus Oils assist in controlling oil-consumption in modern engines, where liner-lacquering is a potential problem and

they meet the performance requirements of API CF.

Gulfmar DPO Plus Oils are recommended for modern medium-speed engines used in marine, power generation and industrial applications operating on distillate fuels having sulphur contents under 1%. Oils of appropriate TBN should be chosen based on the sulphur content of fuel used. Follow the manufacturers' recommendation for selection of the right TBN level/ SAE viscosity grade. Also recommended for general lubrication of shipboard equipment where specialized lubricants are not required or where API CF quality oils are considered adequate.

Gulfmar DPO Plus

Gulfmar DPO Plus	312	412	315	415
SAE	30	40	30	40
Product Code	1834	1835	1836	1837

Specifications: Gulfmar DPO Plus meets API CF

Typical Properties:

Gulfmar DPO Plus	312	412	315	415
Density @ 15°C, kg/m ³	897	900	897	900
Viscosity @ 100°C, mm ² /s	11.5	15.5	11.5	15.5
Flash Point, °C	>220	>220	>220	>220
Pour Point, °C	-21	-18	-21	-18
TBN, mgKOH/g	12	12	15	15



Gulfmar HP 15W-40

Gulfmar HP 15W-40 is a high-performance marine diesel-engine oil developed to meet the performance requirements of modern turbocharged and naturally-aspirated marine diesel engines operating on distillate diesel fuel under severe conditions. Gulfmar HP 15W-40 is blended from highly-refined base stocks and advanced additives to provide very good detergency, dispersancy and antiwear protection with effective acid neutralization capability. Gulfmar HP 15W-40 meets the requirements of most medium- and high-speed marine diesel engines. Gulfmar HP 15W-40 has successfully completed 5000 hours of field-trial on the Caterpillar 3400 series engines and has been

approved by Caterpillar/ Pon Power Nederland.

Gulfmar HP 15W-40 is recommended for turbocharged and naturally-aspirated 4-stroke medium- and high-speed marine diesel engines requiring oils meeting the specifications given in the table below, and also for heavy-duty diesel engines used in mining, construction, agriculture and other off-highway applications. Also suitable for rescue boats, lifeboats, fishing trawlers and coastal vessels and transmissions, compliant with Allison C-4 specifications and for general purposes.

Gulfmar Supreme 15W 40

Gulfmar Supreme 15W-40 is a premium-quality marine engine oil developed to meet the performance requirements of modern turbocharged and naturally-aspirated marine diesel engines operating on distillate diesel fuel under severe conditions. Gulfmar Supreme 15W-40 is blended from highly-refined base stocks and new generation additives to provide excellent detergency, dispersancy and antiwear protection with effective acid neutralization capability. Gulfmar Supreme 15W-40 offers exceptional protection and extended life to low emission diesel engines, including those fitted with Exhaust Gas Recirculation (EGR) systems. Gulfmar Supreme 15W-40 meets the requirements

of most of the medium- and high-speed marine diesel engines.

Gulfmar Supreme 15W-40 is recommended for modern turbocharged and naturally-aspirated 4-stroke medium- and high-speed marine diesel engines requiring oils meeting the specifications given in the table below. Also for rescue boats, lifeboats, fishing trawlers and coastal vessels, turbocharged and naturally-aspirated diesel engines used in on-highway and off-highway applications (mining, construction, agriculture) including those fitted with EGR systems which need to comply with US 2004 emission norms, and other uses.

Marine Oils

Code	Product name	Specifications
1801	Gulfmar MX 15W-40	Meets: API CG-4, ACEA E2, MB 228.1, MAN 271 VOLVO VDS, MTU Type 1, Allison C-4
1805	Gulfmar HP 15W-40	Meets: API CH-4, ACEA E5, MB 228.3, MAN M3275 VOLVO VDS-2, MTU Type 2, Allison C-4 Caterpillar ECF-1, Cummins CES 20076/20077
1815	Gulfmar Supreme 15W-40	Meets: API CI-4, ACEA E7, MB 228.3, VOLVO VDS-3 MTU Type 2, Cummins CES 20071/72/76/77/78 Caterpillar ECF-1, Allison C-4
1834-1837	Gulfmar DPO Plus 312-415	Meets: API CF Approved by: SKL Motor GmbH
1838	Gulfmar Cyloil 540	Meets: MWM Deutz, MAN B&W, Caterpillar /MaK
1840	Gulfmar Cyloil 570	
1852-1859	Gulfmar Select Plus 320-455	Meets: API CF
1870	Gulfmar AL 415	Approved by: DEUTZ AG (see TR 0178-99-0229)
1874	Gulfmar AC 307	
1875	Gulfmar AC 407	
1877	Gulfmar DDC 40	Meets: API CF/CF-2





Industrial Oils

Gulf companies around the world offer an extensive range of top quality lubricants and greases for your business. This portfolio of products is supported by expert service from Gulf's dedicated technical team, so you can always be sure that the correct lubricant is being used and to solve any lubrication-related problems.

Hydraulic Oils (AW)

Gulf Harmony AW Oils are high-performance anti-wear hydraulic oils formulated with high quality base oils and carefully selected performance additives to provide excellent protection against oxidation degradation, rust and corrosion, and wear. Gulf Harmony AW Oils also possess superior foam control, water-separation, and rapid-air-release properties. Gulf Harmony AW Oils are formulated with field-proven thermally-stable zinc-based anti-wear additives.

Gulf Harmony AW Oils can be used in hydraulic systems operating under moderate to severe conditions in mobile and industrial service, and also in older hydraulic systems where leakage is a problem and a cost-effective hydraulic oil providing all-round protection is required. Suitable for mobile hydraulic-fluid power-transmission systems and general machine lubrication.

Gulf Harmony AW Oils

Meets the following specifications:

ISO 11158 HM	Denison HF0, HF1, HF2 (Approved for ISO VG 32, 46 and 68 respectively)
DIN 51524/2 HLP	Cincinnati Lamb P-68, P-70 and P-69 (For ISO VG 32, 46 and 68 respectively)
AFNOR NFE 48-603 HM	Eaton (Vickers) M-2950-S, I-286-S

Typical Properties

ISO VG	15	22	32	46	68	100
Product Code	3504	3505	3506	3507	3508	3509
Density @ 15°C, kg/m ³	858	865	870	874	881	886
Viscosity @ 40°C, mm ² /s	15	22	32	46	68	100
Flash Point, °C	164	186	202	210	218	230
Pour Point, °C	-39	-39	-39	-36	-33	-30

Hydraulic Oils (HVI)

Gulf Harmony HVI Oils are premium quality anti-wear hydraulic oils specially developed for applications in which they will be subjected to a wide range of temperatures but still result in only small changes in viscosity. Gulf Harmony HVI Oils are formulated with high-quality paraffinic base oils, a highly shear-stable polymer and an advanced additive system to meet the stringent requirements of modern hydraulic systems. Gulf Harmony HVI Oils provide excellent protection against oxidation degradation, rust and corrosion, and wear. Gulf Harmony HVI Oils also possess superior foam control, water-separation and rapid-air-release properties. Gulf Harmony HVI Oils exceed the performance requirements of global industry

standards; namely. DIN 51524 Part 3 HVLP, AFNOR NFE 48-603 (HV) & ISO 11158 HV and those of the international OEMs namely Poclain, Hitachi, Cincinnati Lamb, Eaton & Denison.

Gulf Harmony HVI Oils are recommended for hydraulic- and power-transmission systems which are subjected to a wide range of ambient & operating temperatures, critical high-accuracy industrial hydraulic systems, and hydraulic systems of excavators, cranes and hydrostatic drives which are subjected to severe outdoor-operating conditions.

Gulf Harmony HVI Oils

Meets the following specifications:

ISO 11158 HV, DIN 51524/3 HVLP, AFNOR NFE 48-603 HV,

Denison HF-0, HF-1, HF-2 (For ISO VG 32, 46 and 68 respectively)

Cincinnati Lamb, P-70 and P-69 (For ISO VG 46 and 68 respectively)

Eaton (Vickers) M-2950-S, I-286-S, Poclain & Hitachi

Typical Properties

ISO VG	15	22	32	46	68
Product Code	3604	3605	3606	3607	3608
Density @ 15°C, kg/m ³	858	865	870	874	881
Viscosity @ 40°C, mm ² /s	15	22	32	46	68
Viscosity Index	150	150	150	144	147
Flash Point, °C	164	186	202	218	226
Pour Point, °C	-42	-39	-39	-39	-39



Industrial Gear Oils

Gulf EP Lubricant SY Oils are premium-quality synthetic heavy-duty industrial gear oils, and offer outstanding lubrication performance and load-carrying capacity under severe operating conditions including shock loading. Gulf EP Lubricant SY Oils are formulated from PolyAlphaOlefins (PAO) synthetic base stocks having exceptional oxidation resistance and thermal properties and excellent low-temperature fluidity. The combination of naturally high-viscosity index base stocks is coupled with carefully selected

additive technology to provide excellent protection against scuffing and resistance to micro-pitting fatigue across a wide range of operating temperatures.

Gulf EP Lubricant SY Oils are suitable for heavy-duty industrial enclosed gear boxes which operate under severe conditions like high load, extreme temperatures and wide temperature ranges, and are suitable for filled-for-life systems, bearing-, and circulation-systems where high temperatures are encountered.

Gulf EP Lubricant SY

Gulf EP Lubricant SY oils meets the following specifications:

ISO 12925-1 CKD, DIN 51517-3: CLP, ANSI/AGMA 9005-E02, AISE (US Steel 224), David Brown S1.53.101(E)

Typical Properties

ISO VG	100	150	220	320	460
Product Code:	2809	2810	2811	2812	2813
Density @ 15°C, kg/m ³	847	849	853	856	859
Viscosity @ 100°C, mm ² /s	10.8	13.6	19.4	22.8	30.5
Flash Point, °C	>240	>240	>240	>240	>240
Pour Point, °C	-42	-39	-33	-30	-27



Compressor Oils

Gulf Fidelity Oils are high-performance ashless air compressor oils, specially designed to meet the stringent requirements of major compressor manufacturers. Gulf Fidelity Oils are formulated with high quality base oils and carefully selected performance additives, and they provide excellent protection against oxidation degradation, rust and corrosion, foaming and entrained air. The low carbon-forming tendency coupled with high FZG rating make Gulf Fidelity Oils suitable for both reciprocating- and rotary air-compressors. Gulf Fidelity Oils exceed the performance

requirements of DIN 51506 VDL and ISO 6743- 3:2003 DAA Normal Duty.

Gulf Fidelity Oils are recommended for reciprocating air compressors operating with a high discharge temperatures of up to 220°C either in stationary or mobile applications. Also for rotary screw- and vane-compressors, axial- and centrifugal compressors & also used in circulating oil systems, plain- and rolling-element bearings, lightly-loaded gear sets, etc.

Gulf Fidelity (Gulf Fidelity PA)

Gulf Fidelity Oils meets the following specifications :

ISO 6743-3A Category L-DAA / DAB / DAG / DAH

DIN 51 506 Group VBL / VCL / VDL

Typical Properties

ISO VG	32	46	68	100	150
Product Code	4706 (4806)	4707 (4807)	4708 (4808)	4709	4710
Density at 15°C, kg/m ³	854 (833)	879 (846)	882 (850)	884	892
Viscosity at 100°C, mm ² /s	5.6 (6.1)	6.8 (7.9)	8.6 (10.1)	11.5	17.0
Viscosity Index	105 (120)	105 (137)	105 (141)	103	121
Flash Point, °C	212 (220)	216 (242)	220 (254)	228	234
Pour Point, °C	-15 (-45)	-15 (-48)	-12 (-48)	-12	-12

Slideway Oils

Gulf Way Oils are superior quality lubricants, specially developed to meet the requirements of modern high-production machine-tool slideways. Gulf Way Oils are formulated from high quality base stocks and selected additives so that they provide excellent anti-wear and EP characteristics, low frictional properties, adhesiveness filterability and water-separating capabilities. Gulf Way Oils offer superior protection against oil degradation and corrosion of machine tool surfaces, even in presence of aqueous cutting fluids. Gulf Way Oils are especially developed to reduce the "stick-slip" problems associated

with slow-moving and heavily-loaded machine-tool slides, and this leads to improved surface finish and dimensional accuracy of workpieces.

Gulf Way Oils are recommended for slides and ways of lathes, shapers, grinders and milling machines. Gulf Way 32 and 68 are suitable for horizontal slides and ways on small to medium size machine tools while Gulf Way 220 is recommended for large machines where way-pressures are high and also for vertical or inclined slides and ways.

Gulf Way Oils

Gulf Way meets the following specifications:

ISO 6743-13: L-GA/GB/GS, DIN 51502: CGLP, Cincinnati Machine: P-47 (ISO VG 68), Cincinnati Machine: P-50 (ISO VG 220)

Typical Properties

ISO VG	68	150	220
Product Code	4108	4110	4111
Density @ 15°C, kg/m ³	876	890	895
Viscosity @ 100°C, mm ² /s	8.6	14.6	18.8
Flash Point, °C	>205	>220	>220
Pour Point, °C	-21	-18	-15

Gas Engine Oils

Gulfco MA 40 is a high-performance gas engine oil intended for use in highly-rated four-cycle spark-ignited and "dual fuel" natural gas engines requiring "medium ash" oil or where "sour gas" is in use. Gulfco MA 40 is specially developed to meet the requirements of the newer 'lean-burn' engines and also to protect against wear and acid attack from the acidic materials generated during combustion. Gulfco MA 40 is formulated from a specially selected balanced package of additives so as to provide medium ash (0.9%), high TBN, and low levels of phosphorus and zinc. The exceptional reserve alkalinity offsets the negative effects of corrosive materials on engine components and prevents corrosive wear in cylinders, valves and bearings resulting in longer engine-life and lower maintenance

costs. Gulfco MA 40 exceeds the performance requirements of API CF and is also available in SAE 30.

Gulfco MA 40 is recommended for gas engines operating on fuel which contains moderate levels of hydrogen sulphide (H₂S) and for engines operating on fuel which contains corrosive components such as TOHCL (Total Organic Halides as Chlorides), landfill or biomass gases. Suitable for "dual-fuel" gas engines ignited by diesel pilot-fuel and 2-cycle and 4-cycle gas engines that require medium ash oils. Suitable for systems with catalytic converters used in both field-pumping and cogeneration units, and superior- or lean-burn Waukesha engines.

Gulfco MA 40

Performance Specifications:	API CF		
Code	1884		
Typical Properties:			
SAE VG	40		
Density at 15°C, kg/m3	900	Viscosity at 40°C, mm2/s	144
Viscosity at 100°C, mm2/s	14.5	Viscosity Index	>95
Flash Point,°C	240	Pour Point, °C	-15
TBN,mgKOH/g	8.5	Sulphated Ash Content, % wt	<0.9

Gas Engine Oils

Code	Product name	Specifications
1884	Gulfco MA 40	API CF
1894	Gulfco LA 40	API CF



Rock Drill Oils

Gulf Merit Oils are premium-quality oils specially developed for the lubrication of pneumatically-operated rock-drills and other air-operated percussion tools. Gulf Merit Oils are blended from high-quality mineral oils and unique combination of superior film strength, tackiness and anti-wear additives. Gulf Merit Oils provide excellent chemical stability and protection against wear, rust and corrosion. Gulf Merit Oils have good adhesiveness and preferential metal-wetting properties that maintain continuous oil film even in presence of water and thereby reduce the negative effects of water, which condenses from moisture carried along with the air stream. The combination of these properties along with superior

EP characteristics help in providing excellent lubrication and lead to long component-life.

Gulf Merit Oils are recommended for pneumatically-operated rock-drills in underground/surface mining operations and quarry operations and pneumatically-operated drills and jackhammers in the construction of roads and buildings. Also used in a wide variety of heavy-duty pneumatically-operated equipment, percussion and rotary air-operated tools in industrial operations, and suitable for pneumatic equipment by Gardner Denver, Chicago Pneumatic, Ingersoll-Rand and other manufacturers.

Gulf Merit Oils Typical Properties

Code	4607	4609	4610	4611
ISO VG	46	100	150	220
Density @ 15°C, kg/m ³	879	891	895	901
Viscosity @ 100°C, mm ² /s	6.3	11.2	14.6	18.6
Flash Point, °C	200	220	220	200
Pour Point, °C	-33	-30	-24	-21

Performance Specifications:

Gardner-Denver, Joy Manufacturing, Ingersoll-Rand, Sidérurgie Française, Chicago Pneumatics

Railroad Oils

Gulf Dieselmotive 135 is a high performance, zinc-free and chlorine-free oil specially designed to provide excellent engine cleanliness and oil filter life in the modern railroad diesel locomotive engines. Gulf Dieselmotive 135 is formulated with an additive package endorsed by engine manufacturers' and meet the requirements of newer diesel locomotive engines of General Electric (GE) and Electro-Motive Division (EMD) of General Motors. Though the newer engines consume significantly less oil and operate at higher temperatures, the excellent TBN retention property and improved oxidation resistance of Gulf Dieselmotive 135 provides superior service and facilitate extended drain intervals. Gulf Dieselmotive 135 exceeds

the performance requirements of Locomotive Maintenance Officers Association (LMOA) Generation 5 and API CF/CF-2.

Gulf Dieselmotive 135 is recommended for railroad diesel locomotive engines specifying LMOA Generation 5 quality oils & for medium speed two-cycle and four-cycle railroad engines, including newer diesel locomotive engines of GE and EMD of General Motors. Also for marine and stationary engines for power generation or off-shore drilling requiring zinc-free oils. Detroit Diesel 149 series engines operating under severe conditions and stationary engines requiring API CF and CF-2 quality oils.

Gulf Dieselmotive 135 Typical Properties

Code	1881	Specifications
SAE	40	Meets:
Density @ 15°C, kg/m ³ (ASTM D1298)	898	API CF / CF-2
Viscosity @ 40°C, mm ² /s (ASTM D445)	154	Locomotive Maintenance Officers Association (LMOA)
Viscosity @ 100°C, mm ² /s (ASTM D445)	15.6	Generation 5, General Motors (GM) Electro-Motive Diesel
Viscosity Index (ASTM D2270)	98	(EMD) General Electric (GE): Generation 4 Long Life
Flash Point (COC), °C (ASTM D92)	246	
Pour Point, °C (ASTM D97)	-30	
TBN, mgKOH/g (ASTM D2896)	13.2	
Sulfated Ash, wt % (ASTM D874)	1.5	

Refrigeration Compressor Oils

Code	Product name	ISO VG	Specifications
4907/4908/4910	Gulf Eskimo	46/68/100	ISO 6743-3B: L-DRA DIN 51503-1: Group KA
4926/4927/4928	Gulf Eskimo AB	32/46/68	ISO 6743-3B: L-DRA DIN 51503-1 Group KAA/KC
4936/4937/4938	Gulf Eskimo PE	32/46/68	ISO 6743-3B: L-DRB DIN 51503-1 Group KA/KC

Hydraulic Oils

Code	Product name	ISO VG	Specifications
3450/3451/3452	Gulf Harmony R&O	32/46/68	DIN 51515/1 TD
3453/3454/3455		85/100/150/	DIN 51517/2 CL
3456		220	DIN 51524/1 HL
3504/3505/3506		15/22/32	ISO 11158 HM, DIN 51524/2 HLP
3507/3508/3509	Gulf Harmony AW	46/68/100	AFNOR NFE 48-603 HM, Denison** HF0/HF1/HF2 Cincinnati Lamb P-68/P-69/P-70 Eaton (Vickers) M-2950-S/I-286-S
3537		46	DIN 51524/2 HLP, DaimlerChrysler DBL 6721
3556/3557/3558		32/46/68	ISO 11158 HM, DIN 51524/2 HLP AFNOR NFE 48-603 HM, Denison** HF0/HF1/HF2 Eaton (Vickers) M-2950-S/I-286-S, Cincinnati Lamb P-68/P-69/P-70
3604/3605/3606		15/22/32	ISO 11158 HV, DIN 51524/3 HVLP
3607/3608/3609	Gulf Harmony HVI	46/68/100	AFNOR NFE 48-603 HV, Cincinnati Lamb P-69/P-70 Eaton (Vickers) M-2950-S/I-286-S, Poclain Denison HF0/HF1/HF2, Hitachi
3656/3657/3658		32/46/68	ISO 11158 HV, DIN 51524/3 HVLP AFNOR NFE 48-603 HV, Cincinnati Lamb P-69/P-70 Eaton (Vickers) M-2950-S/I-286-S, Poclain Denison HF0/HF1/HF2, Hitachi
3696/3697/3698		32/46/68	ISO 6743-4: HEPR, DIN 51524/2 HLP AFNOR NFE 48-603 HM, Denison HF0/HF1/HF2 Cincinnati Lamb P-68/P-69/P-70 Eaton (Vickers) M-2950-S/I-286-S
3706/3707		32/46	ISO 6743-4: HEES, DIN 51524/3 HVLP AFNOR NFE 48-603 HV, US Steel 126/127 Eaton (Vickers) M-2950-S/I-286-S

Industrial Gear Oils

Code	Product name	ISO VG	Specifications
2608/ 2609	Gulf EP Lubricant HD	68/ 100	Meets: ISO 12925-1 Enclosed Gears of Category CKC
2610/ 2611		150/ 220	DIN 51517 Part 3 – Lubricating Oils CLP
2612/ 2613		320/ 460	AGMA 9005-E02 – Extreme Pressure Gear Lubricants
2614		680	AIST (US Steel) Requirements No. 224 Lead Free EP Gear Oil David Brown S1.53.101(E)

Turbine Oils

Code	Product name	ISO VG	Specifications
3216	Gulf Crest EP 32	32	ASTM D 4304, Type I (non-EP) and Type II (EP) ISO 8086 TSE, TGE, TSA and TGA BS 489, DIN 51515 Part 1 (TD) and Part 2 (TG) GEK 32568E/F, 46506D, 28143A, 107395a, 101941A Solar ES 9-224, Class II. Approved by: Siemens TLV 901304 Alstom HTGD 90117 (Lubricating and Control Oils for Turbines)
3217	Gulf Crest EP 46	46	ASTM D 4304, Type I (non-EP) and Type II (EP) ISO 8086 TSE, TGE, TSA and TGA BS 489, DIN 51515 Part 1 (TD) and Part 2 (TG), Alstom HTGD 90117 V 0001T, GEK 28143A Siemens TLV 901304, Solar ES 9-224, Class II.
3218	Gulf Crest EP 68	68	ASTM D 4304, Type I (non-EP) and Type II (EP) Alstom HTGD 90117 V 0001T
3219	Gulf Crest EP 100	100	ASTM D 4304, Type I (non-EP) and Type II (EP) BS 489





Greases

Gulf Greases are designed for a wide range of applications requiring greases with extreme pressure properties and good load-carrying capacity. The products provide excellent protection against wear caused by heavy-load or shock-load operation.

Gulf Crown MP 2.5

Gulf Crown MP 2.5 is a lithium-thickened lubricating grease based on mineral oil, and contains antioxidants, corrosion inhibitors and Extreme Pressure/Anti-Wear (EP/AW) additives. Gulf Crown MP 2.5 is a high-quality multipurpose grease that can be used in

both industrial and automotive applications. Gulf Crown MP 2.5 is suitable for a wide range of plain- and rolling bearings and has good mechanical stability, a high load-carrying capacity and is suitable for a wide range of applications.

Gulf Crown MP 2.5

Consistency, ASTM D217	NLGI 2-3	
Product Code	5000	
Properties:		Specifications:
Colour	Blue	DIN 51502: KP2,5K-20
Dropping Point, °C	135°C	ISO 6743: ISO-L-XBCEB2,5
Viscosity @ 40°C/100°C,	290 / 20 mm ² /s	
Penetration 60 strokes, ISO 2137, mm/10	245-275	
Temperature range	-20°C - +130°C	

Gulf Crown USG 2.5

Gulf Crown USG 2.5 is a lithium-calcium thickened lubricating grease, based on mineral oil. Gulf Crown USG 2.5 contains EP/AW additives, anti-oxidants and corrosion-inhibitor. Gulf Crown USG 2.5 also contains polymer to improve adhesion. Gulf Crown USG 2.5

is suitable for heavily-loaded industrial applications where water wash-out is problematic, as well as for heavy-duty vehicles working outdoors, in wet or dirty conditions.

Gulf Crown USG 2.5

Consistency, ASTM D217	NLGI 2-3	
Product Code	5026	
Properties:		Specifications:
Colour	Light brown	ISO 6743-9: L-XBCIB2-3
Dropping Point, °C	>160	DIN 51 502: KP2-3K-20
Viscosity base oil @ 40°C/100°C, mm²/s	520/33	
Penetration 60 strokes, ISO 2137, mm/10	250-265	
Temperature range	-20°C - +130°C	

Greases

Code	Product name	NLGI**	Specifications	
5000	Gulf Crown MP 2.5	2-3	DIN 51502: KP2,5K-20	ISO 6743: ISO-L-XBCEB2.5
5007	Gulf Crown EP 1	1	DIN 51502: KP1K-30	ISO 6743: ISO-L-XCCFB1
5008	Gulf Crown EP 00	00	DIN 51502: KP00K-30	ISO 6743: ISO-L-XCCHB00
5009	Gulf Crown EP 0	0	DIN 51502: KP0K-30	ISO 6743: ISO-L-XCCFB0
5010	Gulf Crown EP 2	2	DIN 51502: KP2K-30	ISO 6743: ISO-L-XCCFB2
5011	Gulf Crown EP 3	3	DIN 51502: KP3K-20	ISO 6743: ISO-L-XBCFB3
5020	Gulflex EPG 2	2	DIN 51502: KPF2K-30	ISO 6743: ISO-L-XCCIB2
5023	Gulf Crown LC 2	2	DIN 51502: KP2N-20	ISO 6743: ISO-L-XCDIB2, Volvo 97720
5025	Gulf Crown LCX 3	3	DIN 51502: KP3K-30	ISO 6743: ISO-L-XCCEB3
5026	Gulf Crown USG 2.5	2-3	DIN 51502: KP2,5K-20	ISO 6743: ISO-L-XBCIB2.5
5035	Gulf Crown Synth LC 2	2	DIN 51502: KHCP2N-40	ISO 6743: ISO-L-XDDIB2
5036	Gulf Crown Synth LCX 2	2	DIN 51502: KPHC2K-55	ISO 6743: ISO-L-XECIB2
5070	Gulf Crown HT 2	2	DIN 51502: KP2N-20	ISO 6743: ISO-L-XBDEB2
5090	Gulf Bavex 2.5	2-3	DIN 51502: KP2,5K-20	ISO 6743: ISO-L-XBCEB2.5
5130	Gulf Crown RRC 0.5	0-1	DIN 51502: KPGOG0.5-30	ISO 6743: ISO-L-XCDIB0.5
5200	Gulf Biocal 2	2	DIN 51502: KPE2K-20	ISO 6743: ISO-L-XBCIB2, SS 15 54 70 Environmental Class B

NLGI = National Lubricating Grease Institute

Recommendation Chart

Volkswagen

VW 504 00 and 507 00	Gulf Formula GVX 5W-30	Suitable for use in all current vehicles operating on ultra low sulphur fuel and has LongLife Service capability. See comment below for older versions of R5 and V10 Engines.
VW 503 00 506 00 and 506 01	Gulf Formula FE 0W-30	Suitable for use in older versions of the R5 (used in light trucks) and V10 (SUV-Touareg Pumpeddues (PD) engines (pre week 21-2006).
VW 502 00 505 00 and 505 01	Gulf Formula ULE 5W-40 Gulf Formula ULE 5W-30	Suitable for use in vehicles for standard drain intervals.
VW 502 00 505 00	Gulf Formula GMX 5W-30 Gulf Formula G 5W-30 Gulf Formula G 5W-40 Gulf Formula GX 5W-40	Suitable for use in vehicles without unit injectors, for standard drain intervals.

Ford (Europe)

WSS M2C913-B	Gulf Formula FE 5W-30	Suitable for use in all older vehicles (petrol and diesel). Ford dealers were informed in 2009 to use oils meeting WSS M2C913-C
WSS M2C913-C	Gulf Formula FS 5W-30	Suitable for use in all vehicles (petrol and diesel) including diesels with DPF except vehicles requiring WSS M2C917-A and WSS M2C934-B
WSS M2C917-A	Gulf Formula ULE 5W-40	Suitable for use in Ford DI Diesel for Galaxy TDi (Based on VW engines)
WSS M2C934-B	Gulf Formula EFE 5W-30	Suitable for use in 2.7 and 3.0 I V6 Euro diesel (with DPF) in Jaguar & Landrover.

GM (Europe) / Opel

B-040-2095 (GM-LL-A-025)	Gulf Formula GMX 5W-30	Suitable for use in all gasoline en IDI diesel engines
B-040-2098 (GM-LL-B-025)	Gulf Formula GMX 5W-30 Gulf Formula GMX 5W-30	Suitable for use in all DI diesel engines
dexos 1	Specification not yet released	To be released in 2010, for use in gasoline engines worldwide except Europe including backwards compatibility.
dexos 2	Under development	Released in Oct 2009, for use in gasoline and diesel in Europe including backwards compatibility

Renault

RN0700	Gulf Formula GMX 5W-40	Suitable for use in gasoline cars without turbocharger
RN0710	Gulf Formula GMX 5W-40	Suitable for use in diesel engines without a DPF, gasoline Renault Sport (RS)
RN0720	Gulf Formula RNX 5W-30	Suitable for use in diesel vehicles fitted with DPF

BMW

Long Life 98	Gulf Formula G 0W-30 Gulf Formula G 5W-30	Suitable for use older BMW engines
Long Life 01	Gulf Formula GX 5W-40	Suitable for use in most BMW gasoline and diesel engines (without DPF)
Long Life 04	Gulf Formula XLE 5W-30 Gulf Formula GVX 5W-30 Gulf Formula ULE 5W-30 Gulf Formula ULE 5W-40	Suitable for use in all diesel engines with DPF. May also be used in almost all other BMW engines. Must not be used in BMW gasoline engines in countries outside Europe (EU plus Switzerland, Norway and Liechtenstein)

Daimler

MB 229.1	Gulf MAX Plus 15W-40 Gulf MAX Plus 20W-50 Gulf MAX Plus 20W-40 Gulf TEC Plus 10W-40 Gulf TEC Plus 5W-40	Suitable for use in gasoline (limited) and diesel (limited) engines without DPF.
MB 229.3	Gulf Formula G 0W-30 Gulf Formula G 5W-30 Gulf Formula G 5W-40	Fully synthetic oils suitable for use series 100 and 600 engines
MB 229.5	Gulf Formula GMX 5W-30 Gulf Formula GX 5W-40	Introduced during 2002 for M100 and M200 gasoline engines and OM600 diesel engines (without DPF) operating at drain intervals greater than 229.3 oils, up to 30,000Kms. Offers fuel economy benefit.
MB 229.31	Gulf Formula XLE 5W-30	Suitable for use in Diesel Engines with DPF
MB 229.51	Gulf Formula ULE 5W-30 Gulf Formula GVX 5W-30 Gulf Formula ULE 5W-40	Suitable for use in both gasoline and diesel engines with DPF. Offers fuel economy benefit.

Porsche

Porsche A40	Gulf Formula ULE 5W-40	Suitable for use in all Porsche models except Cayenne V6 and Diesel
Porsche C30	Gulf Formula GVX 5W-30	Suitable for use in Porsche Cayenne V6 and Diesel. Specs based on VW 504 00/507 00

Disclaimer

Data mentioned in this Product Guide are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The information given in this Product Guide is based on past history of the grade only and must not be construed as a guarantee of performance. Always follow the Original Equipment Manufacturer's recommendations for performance level, viscosity grade and oil drain interval. The Material Safety Data Sheets for the products are available with your nearest Gulf Office. Printing errors reserved.



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