

# **Gulf Competition**

# Synthetic Ester Based Engine Oils (SAE 0W-30, 5W-40, 10W-40, 15W-50 and 10W-60)

### **Product Description**

**Gulf Competition** is a range of products specially formulated for, and tested in, race and rally conditions in a variety of cars. These engine oils are based on the very latest concept of synthetic fluids, such as chemically pure esters, that have been carefully chosen to provide the maximum level of engine protection and deliver specific performance benefits vital in motor racing. All the oils incorporate a top-of-the-range additive system which, in other products, attains the high international specifications such as API SL/CF.

Gulf Competition engine oils are available in a variety of viscosity grades, each selected to deliver to the race team benefits appropriate for their type of race or rally competition.

#### **Product Range**

There is a low viscosity (0W-30) oil which is ideal where power use inside the engine itself (from viscous drag, oil pumping, churning) has to be minimized. This oil grade is ideal for short sprint races and for qualifying laps – and the reduced viscometric drag is gained with the minimum effect on oil durability.

At the other extreme, Gulf offers a 10W-60 grade engine oil. This has been developed primarily for use in larger engines, under long endurance race conditions, where high engine temperatures are attained. This grade also compensates for oil thinning where there is fuel dilution from running the engine mixture 'rich' to get the maximum power, or where antilag devices on turbochargers cause fuel dilution.

The 5W-40, 10W-40 and 15W-50 grades complete the range and thus enable the race engineers to select the best oil for their engine.

Car engine designs from the past 20 years to the current date can all be lubricated with one of these oils. In general, the 'heavier' the grade, the better the oil resists fuel dilution and evaporation at high operating temperatures. The lower viscosity grade oils provide for more power transmission onto the road and are generally selected for the smaller, higher revving engines. Thus the 15W-50 grade is used extensively for larger engines under longer and hotter race conditions. It is the oil of choice for competition with classic and vintage car engines, where engine protection is of paramount importance. The 5W-40 grade is typically recommended for the more modern engine designs and provides excellent engine protection even under arduous race conditions. For older small capacity engines, and for production cars used in rally and circuit racing, the 10W-40 grade provides excellent lubrication.

#### Race Pedigree

Gulf Competition products are used and endorsed by Aston Martin Racing. This team has have enjoyed great success at the Le Mans 24h Race and other events running under the famous Gulf blue and orange livery since 2008.

Furthermore, in recent years the technology selected to make these oils have been used with outstanding success in the following motor racing categories:-

Hill Climbs, Drag Races, Touring Cars, Saloon cars Single-marque race categories (such as Formula Ford and Formula Renault), Rallies, and the World Rally Championship (WRC)

#### Use in Passenger Vehicles:

While these oils are excellent for motorsport use, they are not recommended for use in road cars, especially if the car or its engine is still under the original manufacturers' warranty.

Properties mentioned are typical only and minor variations, which do not affect product performance, are expected to arise in normal manufacturing processes. Please follow equipment manufacturer's recommendations for performance level and viscosity grade. The Safety Data Sheet for this product is available from your nearest Gulf Distributor. Please consult our local representative if any further information is required.

The information contained herein is believed to be correct at the time of publication and may be subject to modification from time to time. It is the user's responsibility to verify that this data sheet is current prior to using the product. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.



## **Features & Benefits**

Grade	0W-30	5W-40	10W-40	15W-50	10W-60
Engine Protection	•	•••	•••	***	****
High Temp. Performance	••	•••	•••	***	****
Resistance to Fuel Dilution	•	•••	••	•	****
Internal (drag) Power Loss	***	••	••	•	•

# **Applications**

- High performance, turbo-charged, super-charged, naturally-aspirated, multi-valve gasoline-engined cars
- Diesel powered race cars, including those with indirect injection

# **Specifications, Approvals & Typical Properties**

Specifications	(no formal	specifications can be c		ese oils conta API SL/CF)	ain performan	ce additives	designed to		
Typical Properties per Grade									
Test Paramete	rs	ASTM Method	0W-30	5W-40	10W-40	15W-50	10W-60		
Viscosity @ 100 °C, cSt		D 445	9.6	13.6	14.2	20.2	24.1		
Viscosity @ 40 °C, cSt		D 445	53.8	80.7	86.1	133.8	168.5		
Viscosity Index		D 2270	164	173	171	175	175		
Cold Crank cP		D 5293	6020@ - 35°C	5050@ - 30°C	3369@ - 25°C	3260@ - 20°C	6450@ - 25°C		
Flash Point, °C		D 92	>200	>200	>200	>200	>200		
Pour Point, °C		D 97	-36	-36	-33	-27	-30		
TBN, mg KOH/g	3	D 2896	9.2	9.2	9.2	9.2	9.2		
Density @ 15°C, Kg/l		D 1298	0.855	0.860	0.862	0.865	0.866		



Gulf Competition – ALL GRADES	Gulf Competition products are based on highly purified synthetic base fluids, especially esters, which have been carefully chosen for their thermal and mechanical stability under the most arduous of conditions. Combinations of these fluids, with the advanced friction-modified additive formulations, impart a high degree of engine protection as well as minimising power used to overcome friction and pumping losses within the engine.
Gulf Competition 0W-30	The low viscosity and reduced frictional properties of this oil favours maximum power output from fast revving engines whilst maintaining an adequate level of protection. Ideal for qualifying laps, short sprint, circuit races and hill climbs.
Gulf Competition 5W-40	Recommended for small capacity modern engines (up to 2 litres) and for larger engines in short duration races. This combination of oil technology and viscosity grade has been used successfully in single-seater racing, small saloon cars, single-marque cars and Touring Car races.
Gulf Competition 10W-40	Gulf recommends this for use in small-capacity race engines, with either modern 16-valve OHC and older push-rod OHV designs. This oil is ideal for use in a wide variety of club rally events and saloon car racing.
Gulf Competition 15W-50	An oil for a wide range of race and rally applications, notably longer events and in large (such as American-style V8s and highly rated e.g. ~1000 bhp) engines. Its exceptional level of protection against engine wear, especially in high temperature conditions, is ideal where frequent engine rebuilds must be avoided.  This type of oil is favoured for longer events where high temperatures are experienced and larger engines used. It is popular with enthusiasts of classic and vintage car competitions who are keen to protect their often irreplaceable engines.
Gulf Competition 10W-60	Exceptional racing oil designed for use in naturally aspirated or turbo-charged engines under high-power endurance race conditions. Also useful in engines where rich air-fuel ratios and anti-lag devices on turbochargers often lead to fuel dilution of the oil.  This oil technology has been used with great acclaim in renowned World Rally Championship cars and other race events where the engines have been significantly up-rated.

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