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 ACEA A3/B4 and 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.

Applications

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

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 anti-lag 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

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 if the car or its engine is still under the original manufacturers' warranty.

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	♦♦♦♦♦	♦♦	♦♦	♦	♦

Specifications and Typical Properties

Specifications	(no formal specifications can be claimed, but these oils contain performance additives designed to achieve ACEA A3/B4 and API SL/CF)

Typical Properties per Grade

Test Parameters	ASTM Method	0W-30	5W-40	10W-40	15W-50	10W-60
Viscosity @ 100 ºC, cSt	D 445	9.6	13.6	14.2	20.2	24.1
Viscosity @ 40 ºC, 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@-35ºC	5050@-30ºC	3369@-25ºC	3260@-20ºC	6450@-25ºC
Flash Point, ºC	D 92	>200	>200	>200	>200	>200
Pour Point, ºC	D 97	-36	-36	-30	-26	-32
TBN, mg KOH/g	D 2896	9.2	9.2	9.2	9.2	9.2
Density @ 15ºC, Kg/l	D 1298	0.855	0.860	0.862	0.865	0.866