



### DESCRIPTION

---

**POWER 50** is a specialised high performance four stroke racing engine oil which is formulated to ensure trouble-free lubrication of all highly stressed racetrack engines. This ultra-performance oil provides sustained endurance under all the rigors of competition racing where engines are frequently stressed to their limits; extremes of load, turbocharging, speed and high operating temperatures. The special additive chemistry employed in the product maximises lubricant related power output and gives complete protection against scuffing and scoring of all rapidly moving engine components.

It is recommended where high octane gasolines and their mixtures and other high energy fuels such as methanol and nitromethane are employed. This premium engine oil is also ideally suited to conventional cars in both city and highway motoring.

### CHARACTERISTICS

---

Standing starts, rapid accelerations and the high speeds of racing impose extreme loads on all moving engine parts. It gives complete protection to these highly stressed engines against scuffing, scoring and seizure. Extreme pressure and special anti-wear additives protect all the moving engine parts against premature wear.

The rapid circulation of engine oil in racing engines quickly tends to promote undesirable foam formulation. If not arrested, foam can quickly lead to engine seizure since the air/oil foam mixtures just cannot sustain effective lubrication. It is fortified with a combination of special foam inhibitors which eliminate foam development so that full-bodied lubrication is realised under all the arduous competition racing conditions.

Increased RPM's though small, are a realisable bonus with **POWER 50** since the lower apparent viscosity when compared to other oils results in less internal engine friction. Permanent shear stable viscosity improver polymers which are formulated in the product contribute to this special benefit. They have the ability to minimise viscosity decreases as temperatures increase since there is no permanent shearing so that lubrication is sustained in the critical high temperature ring belt areas. Then special polymers have been selected, however, to allow a minimal amount of temporary shear so that, in the cooler areas, the heavily loaded bearings sense a lower oil viscosity which further assists in reducing fluid drag thus promoting possible increase RPM's due to less frictional losses.

**POWER 50** employs new low ash additive chemistry so that accumulative deposit formation attributed to oil in the combustion zone is virtually non-existent, thereby eliminating power wasting detonation.



Because racing engines rely on unique engineering and design modifications to maximise higher power output and higher speeds, it is essential that these engines be tuned to peak performance. Should deposit formation occur in the combustion zone, increases in compression ratio result which may promote power loss due to inefficient premature fuel ignition. Whilst auto-ignition, audible or inaudible, can be effectively tuned out of engines, it may be at the expense of some power loss and speed and/or the need to rectify it by using non-standard fuels with improved anti-detonation characteristics. These special fuels, however, may not be permissible in the competition event.

## **SERVICE RECOMMENDATIONS**

Recommended for all four stroke racing engines, normally aspirated or turbocharged using gasoline, methanol and other high energy fuels such as nitromethane. Also for city and highway motoring. In addition to meeting the performance requirements of US Military specifications MIL-L-46152E and MIL-L-2104D, it also exceeds the following API Service Classifications:

API SL/CF

<b>Typical Characteristics</b>	<b>Methods</b>	<b>Typical Values</b>
Density, Kg/L at 15°C	ASTM D 1298	0.893
Viscosity, cSt at 100°C	ASTM D 445	20.9
Viscosity, cSt at 40°C	ASTM D 445	184
Viscosity Index	ASTM D 2270	133
Pour Point, °C	ASTM D 97	-27
Flash Point, COC °C	ASTM D 92	246
Ash, Sulphated % Mass	ASTM D 874	0.963
ZDDP, ppm		1500
Total Base Number	ASTM D 2896	8.4
Foaming Characteristics, All Sequences	ASTM D 892	Nil

The facts stated and the recommendations made herein are believed to be accurate. No guarantee of their accuracy is made however, and otherwise expressly provided in written contract, the products are sold without conditions or warranties, expressed or implied. Purchasers should determine the suitability of such products for their particular purpose.