



## *Product One Voice*

### *Q&A*

**Product: RD50, RD30, RD20 Dominator® Crankcase Racing Lubricants**

**Product Area: Motor Oil**

**Created: June 25, 2008**

**Published Date: June 25, 2008**

---

**1. Question:**

What are the main benefits of the three new racing motor oils?

**Answer:** The new racing oils provide the shear stability of straight-grade oils in multi-viscosity formulations, ensuring the same level of protection from the start of the race to the finish. The oils are heavily fortified with zinc and phosphorus additives to protect critical metal surfaces in extreme conditions. The proprietary friction modifier included in all three oils helps reduce friction for maximum power output and cooler running engines. The new AMSOIL racing oils deliver continuous, long-lasting protection in both racing and high performance street vehicles.

**2. Question:**

Why did AMSOIL apply the Dominator® name used on AMSOIL Dominator® 2-Cycle Oil to the new crankcase racing oils?

**Answer:** The Dominator® name is widely recognized and synonymous with outstanding performance in two-cycle racing applications. It is a natural fit that the name is extended to the new line of racing oils.

**3. Question:**

Why is AMSOIL Series 2000 20W-50 Racing Oil (TRO) being discontinued?

**Answer:** TRO is being discontinued with the introduction of RD50. This new formulation more effectively targets the updated needs of racers. It provides the high level of engine protection and power these racers desire.

**4. Question:**

Can these oils be used in hot rods?

**Answer:** Yes, absolutely. These oils are formulated with high levels of zinc and phosphorus to protect flat tappet cams found in hot rods.

**5. Question:**

Who are typical users of the racing oils?

**Answer:** The three new racing motor oils have been formulated for a wide range of racing and street performance applications, including high rpm/high horsepower, turbo/supercharged, gasoline, alcohol-burning and nitrous oxide injected engines. In addition, because of the higher viscosity, RD50 is applicable for nitro-fueled racing applications. Specific racing recommendations are listed on the product

description page of the AMSOIL website and on the package label. The racing oils are also ideal for street rods, hot rods, classic cars, muscle cars and other high performance domestic and import vehicles.

**6. Question:**

What is the warranty coverage on the new racing oils?

**Answer:** AMSOIL INC. warrants all of its products against defects in workmanship, regardless of their use. While the inherent properties of AMSOIL products make them well-suited for racing, factors outside of AMSOIL control make it impossible to offer any additional warranty on products used for racing. These factors include vehicle modifications, operating conditions beyond those for which the OEM designed, specialty fuels, and others – all of which can place extreme stresses on an engine. Since AMSOIL cannot predict the factors which may come into play under specific racing conditions or equipment designs, it is unable to guarantee specific equipment performance or longevity.

AMSOIL can and does guarantee that products will be free of defects. Customers who feel there may be some defect in an AMSOIL lubricant may submit a sample of the lubricant for analysis at no charge. If the product is defective, the AMSOIL warranty applies. A copy may be obtained by following the link on AMSOIL's website: [www.amsoil.com](http://www.amsoil.com), or by contacting AMSOIL Technical Services at (715) 399-8324.

**7. Question:**

How is the correct oil viscosity for a specific application determined?

**Answer:** Customers should refer to their owner's manuals or consult their engine builder for the correct oil viscosity for the engine bearing clearances. They may also call AMSOIL Technical Services for guidance.

**8. Question:**

Can the racing oils be used for extended drain intervals?

**Answer:** AMSOIL does not recommend an extended drain interval for the Dominator® Racing Oils. Follow OEM recommendations for drain intervals.

**9. Question:**

What is the difference between Dominator® 10W-30 (RD30) and the AMSOIL 10W-30 (ATM)?

**Answer:** The racing oils are uniquely formulated for the high RPMs, high temperatures and shock loading conditions encountered in racing and other high performance applications.

**10. Question:**

What are the API specifications for racing oils and why aren't they listed?

**Answer:** API specifications are not applicable to racing oils.

**11. Question:**

These racing oils contain friction modifiers. Are they suitable for motorcycles?

**Answer:** The racing oils are not wet-clutch compatible and are not recommended for use in motorcycles.

**12. Question:**

Why was RD50 formulated as a 15W-50 and not a 20W-50?

**Answer:** The advanced chemistry of the Dominator® Series allows for the formulation of a 15W-50, which provides better protection for engines during cold starts. Additionally, it provides less drag when the engine oil temperature is not up to stable operating temperatures.

**13. Question:**

Do these oils have Zinc and Phosphorus in them, and are they going to protect my flat tappet?

**Answer:** The Dominator® Racing Oils are formulated with high levels of both zinc and phosphorus and will provide superior protection for flat tappet cams and high-tension valve springs.

**14. Question:**

Are these oils compatible with other racing oils?

**Answer:** AMSOIL Dominator® Oils are compatible with other oils; however, intentionally mixing oils is not recommended; particularly in racing applications. Oil left over from oil changes does not pose a problem.

**15. Question:**

How do these oils compare to TRO in terms of wear protection? TRO has a published Four-Ball Wear Test result of 0.43 while RD50 is listed at 0.47?

**Answer:** Both TRO and RD50 reflect outstanding Four-Ball results, and each clearly demonstrates superior wear protection when compared to the competition. The difference in the Four-Ball scores does not represent the additional performance gained with RD50. While TRO was an excellent oil, RD50 is formulated with chemistry engineered for better overall performance in today's high performance engines and racing applications. With the addition of a new proprietary friction modifier, RD50 helps deliver more power to provide racers with an extra competitive edge.

**16. Question:** Why is the Total Base Number (TBN) lower in racing oils?

**Answer:** Since racing oils are not intended for extended drain intervals, there is no need for high detergent levels.

**17. Question:**

Why are some applications listed on two or three of the racing oils?

**Answer:** All three oils are formulated with the same robust additive package and have superior shear stability, providing straight grade protection in a multi-viscosity oil. The applications listed for each product are based on the predominant engine design and race application for that viscosity grade. Ultimate selection of race oils should be done in conjunction with the engine builder taking into account bearing clearances and racing application. Engines are highly modified and specifics vary in the racing industry. Dropping down a viscosity level will generally deliver more power if engine design and application allow.

**18. Question:**

What are the benefits of having a 100% Synthetic racing oil?

**Answer:** AMSOIL Dominator® Oils are built with a uniform molecular structure that reduces fluid friction. Lower friction, decreases temperatures and improves engine efficiency and power. Additionally,

AMSOIL Dominator® Oils can withstand extreme heat, pressure and mechanical abuse. They are very durable and deliver outstanding engine protection.

**19. Question:**

What is going to happen to AMSOIL Super Heavy Weight SAE 60 Racing Oil (AHR)? Is that also going to join the Dominator® line?

**Answer:** AMSOIL has recognized the need for a heavy viscosity drag racing oil and will be studying this category to see whether there is an opportunity to provide another unique AMSOIL solution.

Jeff Fisher

866-292-4700

[www.SyntheticOils.us](http://www.SyntheticOils.us)