

Mobil 1 Racing Product Guide



Mobil 1 Racing<sup>™</sup> Products

Race-Proven by Champions

Mobil 1<sup>™</sup>, the world's leading synthetic motor oil brand, has long been the lubricant of choice for race teams competing in motorsports series across the globe.

Mobil 1 Racing oils exploit many core performance attributes found in Mobil 1 oil technology that are directly beneficial to racing engine performance, such as outstanding high temperature wear and deposit protection.

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Mobil

Racing



Mobil 1 products are race-proven and the result of extensive testing and development in a wide range of race series including:

- NASCAR Monster Energy Cup Series<sup>™</sup>
- NASCAR Xfinity Series<sup>™</sup>
- NASCAR Camping World Truck Series<sup>™</sup>
- NASCAR Whelen All-American Series<sup>™</sup>
- Formula 1™
- FIA World Endurance Championship™
- World of Outlaws Late Model Series<sup>™</sup>

- IMSA WeatherTech SportsCar Championship™
- World of Outlaws Sprint Car Series
- Moto 2 ™
- FIA GT World Cup
- Pirelli World Challenge
- FIA World Rally Championship



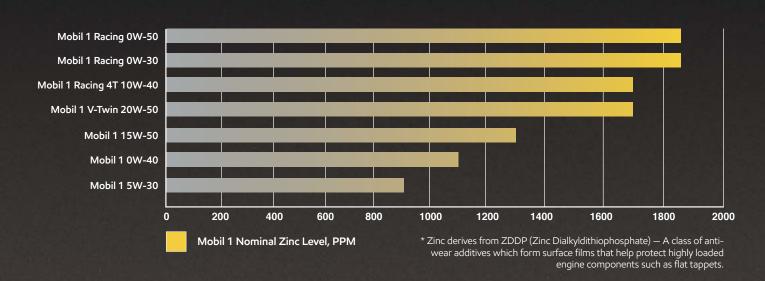
# Racing Oil 101

Viscosity refers to the weight and thickness of a motor oil. Motor oil gets thicker when it's cold and thinner when it heats up.

- The first number (i.e. **0**W-50) indicates the ability of the oil to flow at temperatures as low as -40°C or -40°F. Contrary to misconception, the "W" stands for wintergrade and helps differentiate multi-grade motor oils.
- The second number (i.e. 0W-**50**) indicates the viscosity at operating temperatures (100°C or 212°F).

While some racers see the "0W" and think this oil would be too light, in fact Mobil 1 Racing<sup>TM</sup> 0W-30 and the 0W-50 have the same or higher viscosity at operating temperatures as other SAE 30 and 50 grade oils.

# Mobil 1 Nominal Zinc Level





**Wear Protection:** Engine configuration should dictate whether a high zinc oil is needed or not. Select an oil which offers maximum protection.

**Temperature Range:** Select an engine oil based on the operating race engine temperature for the best engine film thickness to protect your engine.

**Protection Against Deposits:** Not all race oils offer the detergency and additive content to protect against deposits. Deposits insulate against the cooling properties of the engine oil and can shorten engine life and lower performance and efficiency.

**Viscosity Grade:** Select the viscosity grade which best suits the application and provides the best combination of power and protection. A wider viscosity range oil such as a 0W-50 can be better suited for some race engine configurations.

### Mobil 1 Racing Oil Advantages:

- Double the zinc for protection in extreme racing conditions.
- Advanced fully synthetic proprietary base oil technology.
- Protection against high temperatures and deposits.
- Friction reduction to deliver increased horsepower.
- Detergent technology provides excellent engine component cleanliness.
- Offered in two viscosity ranges for a variety of racing applications: Mobil 1 Racing<sup>™</sup> 0W-30 and Mobil 1 Racing<sup>™</sup> 0W-50.

# Product Families

# Track-Use Only

Features double the zinc versus regular street oils and are specifically designed to maximize horsepower and reduce friction in race engines.

# Street and Track

Race-proven products that are used by many of the world's most successful race teams to win at the 24 Hours of Le Mans and your local track.

# Towing

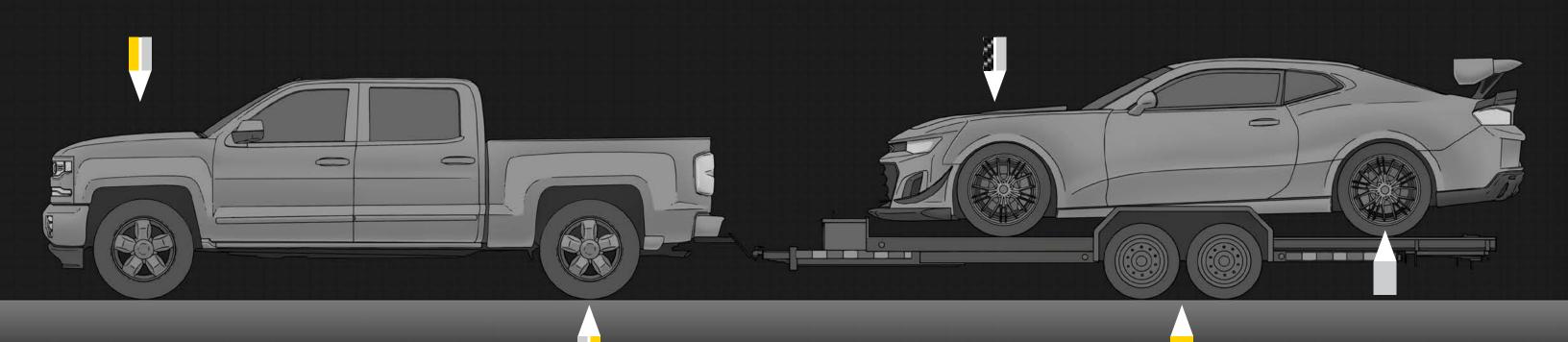
Nothing works harder than Mobil Delvac<sup>™</sup> engine oils in some of the most severe on- and off-highway applications while delivering excellent performance.







# Race-Proven Technology for Your Entire Garage



# Track-Use Only

- Mobil 1 Racing<sup>™</sup> 0W-30
- Mobil 1 Racing<sup>™</sup> 0W-50

# Street and Track

- Mobil 1<sup>™</sup> 5W-20
- Mobil 1™ FS 0W-40
- Mobil 1<sup>™</sup> Synthetic Gear Lube LS
- Mobil 1<sup>™</sup> 5W-30
- Mobil 1<sup>™</sup> 15W-50

Towing

- Mobil Delvac<sup>™</sup> 1300 Super
   Mobil Delvac 1<sup>™</sup> ESP
- Mobil Delvac™ Extreme
- Mobilith SHC<sup>™</sup> Grease
- Mobil Delvac 1<sup>™</sup> Gear Oil

## **Track-Use Only Oils**

Mobil 1 Racing oils are proprietary formulations of low viscosity synthetic base oils. They are fortified with a precisely balanced component-blended additive system, featuring high levels of anti-wear and friction-reducing additives.

Mobil 1 Racing<sup>™</sup> 0W-30 and 0W-50 were developed specifically for racing engines and are not recommended for street use.

# Mobil 1 Racing<sup>™</sup> **0W-30**

# Key Features:

- Boosted levels of anti-wear protection (nominal zinc level of 1850 ppm) well beyond those of typical automotive engine oils.
- Exceptional high-temperature protection in high RPM engine operation, even at temperatures over 500°F (260°C).
- A very low friction racing oil developed for a wide variety of race engines and is recommended and used by builders of engines for NASCAR and ARCA Series.



## Key Features:

- Recommended for higher temperature and durability racing applications.
- Boosted levels of anti-wear protection (nominal zinc level of 1850 ppm) well beyond those of typical automotive engine oils.
- Recommended for a wide range of race engine applications, including highly loaded flat tappet designs.
- Exceptional high-temperature protection in high RPM engine operation, even at temperatures of over 500°F (260°C).





# Upgrading to Mobil 1 Racing™ Oils

- Mobil 1 full synthetic motor oils are used by many of the world's most successful race teams today. What
  Mobil 1 Racing oils offer is a product designed specifically for use by professional, amateur and weekend
  racers and is trusted in the world's most extreme race conditions. These track-use only products contain
  double the zinc versus regular street oils, which helps provide maximum horsepower and outstanding
  wear protection.
- While some racers see the "OW" and think Mobil 1 Racing oils are too light in viscosity, in fact Mobil 1
  Racing OW-30 and the OW-50 have the same or higher viscosity at operating temperatures as the other
  SAE 30 and 50 grade oils. This is why we recommend racers consult with their engine builder when
  upgrading to Mobil 1 Racing oils by matching their current product viscosity to that shown below.

# Which Mobil 1 Racing oil is right for me?

Current Product Mobil 1 Racing™ Product

5W-30 Mobil 1 Racing 0W-30

15W-50 — Mobil 1 Racing 0W-50

20W-50 — Mobil 1 Racing 0W-50

## The Complete Performance Package

Mobil 1 Technology and Chevy Performance.

Mobil 1 is now the "Official Motor Oil of Chevrolet Performance". So, every Chevrolet Performance crate engine sold can come with two cases of Mobil 1 full-synthetic for your street-ready hot rod, or two cases of Mobil 1 Racing oil for your racing engine.

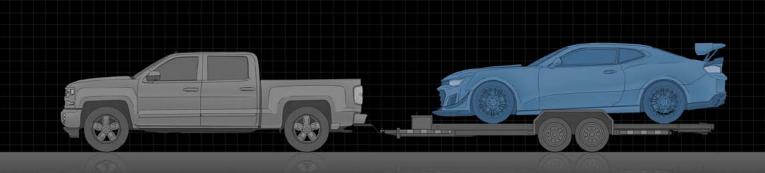




#### John Heinricy

13-Time SCCA National Champion

I'm an engineer first and a racer second. So no matter what racecar I look to set up, I know having Mobil 1" under the hood will help reduce unnecessary costs and performance issues.



#### **Street and Track Oils**

Mobil 1 full synthetic motor oils feature race-proven products that are used by many of the world's most successful race teams to win at the 24 Hours of Le Mans and your local track.



5W-30

Advanced full synthetic formulation designed to meet the requirements of many domestic and imported vehicles, including GM and Mercedes.



**FS 0W-40** 

Advanced full synthetic formulation designed to meet the requirements of many european vehicles.



15W-50

Boosted, higher viscosity, advanced full synthetic formula designed for performance vehicles.

"The same lubricant which succeeds on the race circuit also delivers everyday driving benefits of reduced exhaust emissions, improved engine reliability and extended oil change intervals for every Porsche owner. This explains why Porsche has factory-filled by now over one million Porsche vehicles with the same 0W-40 grade of Mobil 1 and why it is recommended by Porsche for every service oil change."

-Porsche

#### **Street Gear Lubes and Greases**

# **Mobil 1 Synthetic ATF**

 Mobil 1 Synthetic ATF is a multi-vehicle, fully synthetic fluid designed to meet the demanding requirements of modern passenger vehicles.

# Mobil 1 Synthetic Gear Lube LS 75W-90 & 75W-140

 Meets or exceeds the highest level of performance requirements of any modern passenger vehicle. Helps protect against thermal and oxidative degradation, wear and corrosion, and viscosity loss associated with premature shearing.

## **Mobil 1 Synthetic Grease**

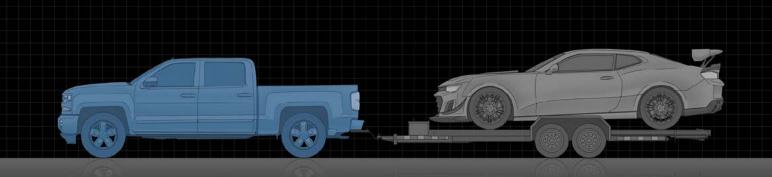
 All Mobil 1 Lubricants - just like the Mobil 1 family of motor oils - protect hardworking parts from temperature extremes, rust and wear. In fact, we use the same synthetic technology from our motor oil in our fully synthetic grease.



# Mobil 1 Full Synthetic Grease is suitable for:

- Wheel bearings.
- Ball joint suspensions.
- Steering linkages.
- Pin and chassis lube points.
- Excellent resistance to rust and corrosion.
- Strong shock-loading protection.
- Excellent resistance to water washout.
- Outstanding lubrication over a wide temperature range.
- Certification to the NLGI GC-LB specifications for both chassis and wheel bearing lubrication.





## **Towing Oils**

Trusted by many of the world's leading heavy-duty original equipment manufacturers, Mobil Delvac<sup>™</sup> commercial vehicle lubricants are used across a broad range of industries.

# Mobil Delvac 1300 Super 10W-30 Mobil Delvac 1300 Super 15W-40

- Performance for up to 50% beyond OEM recommended ODIs\*
- Backwards compatible with API CJ-4 oils, providing excellent performance in both new and old engines\*\*.
- Operating in high speed, high load conditions, as well as short haul pick up delivery service.

## Mobil Delvac Extreme 15W-40

A premium synthetic blend, high-performance diesel engine oil that helps extend engine life while providing long drain capability for modern diesel engines operating in extreme conditions. They are recommended for use in a wide range of heavy-duty applications and operating environments found onand off-highway, including engines operating under heavy loads.

- Exceptional temperature performance oxidation stability\*.
- Performance up to 2X OEM-recommended oil drain intervals\*\*.
- 46 percent more antioxidant and 44 percent more anti wear additive than compared to Mobil Delvac 1300 Super.
- Excellent soot and viscosity control.

\*\*Results may vary based on vehicle/engine condition, driving and environmental conditions. Consult OEM or ExxonMobil before implementing extended ODIs.

#### Mobil Delvac 1 ESP 5W-40

- Ultimate synthetic performance for all conditions.
- Enhanced emission systems protection in a variety of sever conditions.
- Diesel applications using older and naturally aspirated conventional designs.









# **Towing Gear Lubes and Greases**

# Mobil Delvac 1 Gear Oil 75W-90 and 80W-140

- A fully synthetic drivetrain lubricant designed for use in heavy-duty drivetrains that require gear lubricants with excellent load-carrying capability and where extreme pressures and shock loading are expected.
- Under demanding conditions, like during track-use, Mobil Delvac 1 Gear Oil helps reduce damage caused by shock loading and extreme pressures.



# **Mobilith SHC 1500 Mobilith SHC 460 Mobilith SHC 220**

Mobilith SHC Series greases are superior performance products designed for a wide variety of applications at extreme temperatures. They combine the unique features of synthetic base fluids with those of a high quality lithium complex thickener.



## Mobilith SHC Recommended Applications:

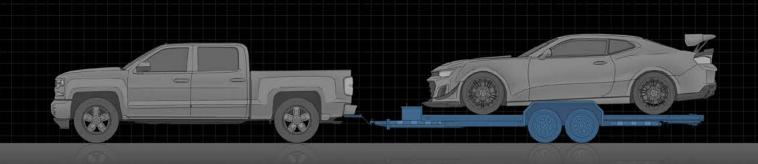
- High-Load, High-Speed Trailer Wheel Bearings.
- Extreme Pressure Grease for Heavy-Duty Automotive and Industrial Applications.
- Rolling Element Bearings, Operating Under Heavy Loads and High Temperatures.



#### Donny Schatz

Driver, Tony Stewart Racing 7-time and defending World of Outlaws Sprint Car Series Champion

technology and race-proven results. It's great to be partnered with a brand that not only produces championship winnir



Product	Nominal Phosphorus Level, PPM	Nominal Zinc Level, PPM	Product Description	Recommended consumer applications	APL, ILSAC, and other OEM approvals	SKU#
Mobil 1 Racing <sup>™</sup> 0W-50	1750	1850	Advanced full synthetic formula specifically designed to maximize horsepower under race conditions.	Race engines. Not recommended for street use.	-	6x1QT - 104145
Mobil 1 Racing <sup>™</sup> 0W-30	1750	1850	Advanced full synthetic formula specifically designed to maximize horsepower under race conditions.	Race engines. Not recommended for street use.	-	6x1QT - 102622
Mobil 1 <sup>™</sup> FS 0W-40	1000	1100	Advanced full synthetic formulation designed to meet the requirements of many European vehicles.	Many European vehicles. HT/HS applications.	SN, Porsche A40, Nissan GT-R, Chrysler MS10850, Chrysler MS10725	6x1QT - 112628
Mobil 1 <sup>™</sup> ESP Formula 0W-40	900	990	Advanced Full Synthetic formula designed specifically for gasoline and diesel engines with emission systems	Newer Corvettes and Camaros that call for 0W-40	-	-

Product	Nominal Phosphorus Level, PPM	Nominal Zinc Level, PPM	Product Description	Recommended consumer applications	APL, ILSAC, and other industry approvals	SKU#
Mobil 1 <sup>™</sup> 15W-50	1200	1300	Boosted, higher viscosity, advanced full synthetic formula designed for performance vehicles	HT/HS applications. Racing and Flat tappet applications.	SN	6x1QT - 122377
Mobil 1 <sup>™</sup> 5W-20	1000	900	Advanced full synthetic formulation designed to meet the requirements of many newer vehicles including Hondas, Fords, Chryslers and newer Toyotas	Vehicles that require 5W-20	GF-5, SN Plus	6x1QT - 103008
Mobil 1 <sup>™</sup> 5W-30	800	900	Advanced full synthetic formulation designed to meet the requirements of many domestic, including GM, and imported vehicles	Vehicles that require 5W-30. Corvette approved.	GF-5, Honda HTO-06, SN Plus	6x1QT - 102991
Mobil 1 Racing™ 4T 10W-40	1200	1300	Advanced full synthetic formulas designed specifically for motorcycles where clutch lubrication is also important.	All motorcycles where 10W-40 is specified.	JASO MA/ MA2, API SH	6x1QT - 122286
Mobil 1 <sup>™</sup> V-Twin 20W-50	1600	1750	Advanced full synthetic formulas designed specifically for motorcycles where clutch lubrication is also important.	All motorcycles where 20W-50 is specified, especially V-Twin engines.	SL	6x1QT - 112630

Product	Product Description	Recommended consumer applications	Industry approvals	SKU#
Mobil 1 <sup>™</sup> Synthetic Gear Lube LS 75W-90 & 75W-140	Mobil 1" Syn Gear Lube LS 75W-140 is a high performance, synthetic, multi- purpose, automotive gear lubricant.	Transaxles and rear axles.	GL-5	<b>75W-90</b> 12x1QT-104361 5GA-105704 <b>75W-140</b> 12x1QT-102490
Mobil 1 <sup>™</sup> Synthetic ATF	Mobil 1" Synthetic ATF is a multi-vehicle, fully synthetic fluid designed to meet the demanding requirements of modern passenger vehicles.	Power steering.	JASO 1-A Ford Mercon V	6x1QT - 112980 55GA drum - 105473
Mobil 1 <sup>™</sup> Synthetic Grease	Mobil 1 Synthetic Grease is an NLGI No. 2 high-performance automotive grease which combines a synthetic base fluid with a lithium complex soap thickener.	Wheel bearings, suspension points and engine assembly.	NLGI GC-LB	12x1LB tubs - 102481 40x13.4oz Cartidge - 121070
Mobilith SHC 220, 460, 1500	Mobilith SHC <sup>**</sup> Series greases are superior performance products designed for a wide variety of applications at extreme temperatures. They combine the unique features of synthetic base fluids with those of a high quality lithium complex thickener.	Wheel bearings and tripod joints.	220 - KPHC 2N-30 460 - KPHC 1-2N- 40 1500 - KPHC 1-2N-30	220 5GA pail - 105801 40 tubes - 110629 50GA bucket - 105792 460 40 tubes - 110630 1500 40 tubes - 110628
Mobil Delvac 1300 Super™	Mobil Delvac 1300 Super is a tailored formulation that is designed for use in heavy duty commercial and marine vehicles. Compatible with gasoline and diesel engines.	Latest heavy duty diesel trucks. On and off highway vehicles under high load and high speeds	API CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4 / SN	6x1QT - 122494 4x1GA- 122492
Mobil Delvac 1 <sup></sup> ESP	Mobil Delvac ESP is designed for on and off road severe use diesel engines, and provides a much longer drain interval.	Most turbo engine generations up to the latest in direct injection.	ACEA E9-2016, E7-2016. Caterpillar ECF-3. Cummins CES 20086, 20081. JASO DH-2	4x1GA- 122271

# Mobil 1 Racing Oils Frequently Asked Questions

Q.01

What makes Mobil 1 Racing™ oil the best choice for my race engine?

Mobil 1 has more than 40 years of experience in formulating lubricants for all types of racing worldwide. Engine builders, racers, and team owners have long relied on the high level of performance and engine protection of Mobil 1 engine oils. Track-use only Mobil 1 Racing oils are the newest in our pedigree of winning formulations and are designed to help improve engine performance and protect against wear.

Q.02

Can I run the lighter viscosity Mobil 1 Racing™ 0W-30 oil without sacrificing engine durability?

Lighter viscosity oils can be used depending on specifics such as engine design, engine operating temperatures, and type of racing. We recommend to consult your engine builder for advice on your specific application and performance needs.

Q.03

Can I use Mobil 1 Racing<sup>™</sup> oil in my street car?

This is not recommended due to the higher levels of additive elements such as Zinc and Phosphorus contained in Mobil 1 Racing oils which can have an adverse effect on the exhaust emission control systems fitted to street cars.

Q.04

Do I need to run break-in oil before using Mobil 1 Racing™ oils?

Although no special break-in oil is required to use with Mobil 1 Racing oils, we suggest you consult with your engine builder for your specific application.

Q.05

Can I use Mobil 1 Racing™ oils in a turbocharged application?

Yes. Mobil 1 Racing oils are specifically formulated with race-proven technology that helps combat deposit formation in high temperature areas of the engine such as the turbocharger.

Q.06

How does Mobil 1 Racing™ 0W-50 react to ethanol/methanol-based fuels?

Mobil 1<sup>™</sup> advanced full synthetic motor oils are compatible with most fuels; however, excess fuel dilution may require more frequent changes and used oil analysis for quality monitoring.

Q.07

Do you have a tech line that customers can call if they have a question?

Mobil 1 has a dedicated support line for requests regarding the complete line of Mobil 1 products. Please call us anytime, on or off the track, at 1-800-662-4525.

Upgrade Now: mobil1racing.com/upgrade



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