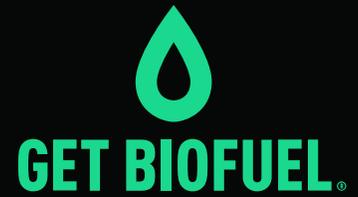


## ENGINE PERFORMANCE 101:

# Unlocking the Power of E15



## A CLEANER BURNING FUEL

Ethanol is the cleanest, most affordable high-octane fuel on the market. It provides a superior octane boost without the carcinogens associated with other fuel additives.

## MORE OCTANE FOR MORE POWER

High-octane fuels like ethanol enhance engine performance by delivering more horsepower and speed. Most vehicles require a minimum octane rating of 87. Ethanol, with an octane rating of 113, helps meet that in modern cars. Ethanol is a cleaner, renewable, and cost-effective alternative to toxic chemicals like lead and MTBE. As a result, ethanol is now blended into 98 percent of motor fuels in the U.S., providing a safe and efficient boost to fuel performance.

## MORE OCTANE FOR GREATER EFFICIENCY

Turbocharging forces more fuel and air into a smaller volume, increasing pressure but potentially causing low-octane fuels to ignite prematurely, reducing efficiency and damaging the engine. High-octane fuels, like ethanol, are essential for high-compression, turbocharged, or supercharged engines, ensuring proper ignition timing and delivering more power.

Future U.S. fuel efficiency standards may require higher-compression engines, necessitating higher-octane fuels, which ethanol can provide at a lower cost.

## MOST TESTED FUEL IN HISTORY

EPA approved E15 for use in 9 out of 10 cars on the road, including 2001 and newer passenger vehicles. Flex Fuel vehicles can run on blends up to 85%. The Department of Energy ran E15 for 6 million miles of testing before approval.

## MORE MILES, MORE VALUE

-  E15 typically saves up to 30 cents a gallon with little to no impact on mileage.
-  Consumers have now driven more than 205 billion miles with no reported issues.



**“Ethanol is a low-cost, high-octane biofuel that is added to nearly every gallon of gasoline sold in the U.S. The boost from ethanol’s octane enhances engine performance and allows for more efficient engine designs. Ethanol delivers greater power, less pollution and more miles per dollar — a winning combination for American drivers.”**

**— Richard Childress**  
NASCAR team owner