



E15 in the Transportation Fuel Marketplace: **Use of E15 in your Automobile FAQs**

As E15 (85 volume percent gasoline, 15 volume percent ethanol) is poised to enter the marketplace, many consumers have questions about the use of E15 in their vehicles. Some of the most common questions are answered below.

- Q. How does E15 differ from the ethanol blends that have been sold for decades?
- A. *Until recently gasoline ethanol blends were limited to a maximum ethanol content of 10 volume percent (v%). This fuel, commonly referred to as E10, represents 97% of the gasoline sold in the U.S. While E15 uses the identical type of ethanol as used in E10, the level of ethanol is increased to 15v%.*
- Q. Has the federal government approved of the use of E15?
- A. *Yes. The U.S. Environmental Protection Agency (EPA) has issued a waiver to permit the use of E15 in certain model year cars and light-duty vehicles (pick-up trucks, vans, SUV's).*
- Q. What vehicles and equipment are permitted to use E15?
- A. *The U.S. Environmental Protection Agency's (EPA) E15 approval is for use in 2001 and newer autos and light-duty vehicles as well as all flex-fuel vehicles (FFV's). EPA has not allowed the use in vehicles from the 2000 model year (non-FFV's) and earlier. Similarly, E15 has not approved for use in non-automotive engines, for example lawnmowers and boats.*
- Q. Were any tests conducted on E15 before it was allowed to be introduced into commerce?
- A. *Based on an extensive and detailed review of all available studies, the EPA approved the use of E15 in 2001 and newer model year cars and light-duty vehicles and all model years of FFV's. For the vehicles that EPA has approved for E15 use, drivers can rest assured that EPA has thoroughly assessed such use and has found no reason for concern. In fact, E15 has undergone more testing than any automotive fuel previously introduced into commerce. Over the past several years numerous tests on the use of higher level ethanol blends, such as E15 and E20 have been conducted on a wide variety of vehicles and equipment. These tests were conducted by various stakeholders and interested parties with a great deal of testing being coordinated by the U.S. Department of Energy (DOE) and its affiliated National Laboratories. Tests have included vehicle driveability, catalyst durability, fuel pumps and sending units, onboard diagnostic systems, automotive fuels systems component, and numerous studies by the Coordinating Research Council, which has included E15 and / or E20 in many of its research projects.*

- Q. Why did EPA limit the use of E15 to 2001 and newer model years?
A. *EPA chose not to extend the permitted use of E15 to 2000 model year and older vehicles in large part due to the fact that controlled tests cannot be performed on such old vehicles due to various mileage levels, types of use, state of repair and other variables that would render test results inconclusive.*
- Q. Why is E15 use not permitted in non-automotive engines?
A. *Many non-automotive engines do not have the sophisticated computer controls to adjust for fuel variations. This category also covers a much broader range of applications, duty cycles, engine types, engine sizes, and cooling technology. This makes it very difficult to test for all scenarios that could be experienced in field use.*
- Q. Will E15 damage my vehicle?
A. *Ethanol can help your car run better. It is a natural, biodegradable high octane additive. It can help reduce engine knock and pinging while also removing gum and other deposits from your fuel system. It helps prevent your gasoline line from freezing in the cold of winter. And because of its high oxygen content, it helps your make your car emissions cleaner, therefore reducing greenhouse gas emissions by 30-50%. It is an American-made product that in 2011 helped lower the price of gasoline by \$1.09 a gallon, saving the average American family more than \$1,200 on their gas bill for the year.*
- Q. Will the use of E15 affect my vehicle's warranty?
A. *While the EPA offers clear guidance on the use of E15, some auto manufacturers may not. Since E15 was only recently approved for use, vehicle owner's manuals for the 2001 through 2012 model years do not offer guidance on the use of E15 since it was not an approved fuel when these vehicles were manufactured. It is likely that 2012 and later model year owner's manuals will contain such guidance. Therefore, owners of 2001 through 2012 model year vehicles should check with the auto manufacturer or an authorized dealership for guidance on using E15. EPA stated that manufacturers may not deny a warranty based on the use of a different fuel if that fuel did not cause the problem for which the warranty claim is made. This is an identical situation to lack of inclusion in owner's manuals and the availability of suboctane gasolines that are a minimum 86 AKI.*
- Q. Will my fuel economy be affected by the use of E15?
A. *There are many variables that can impact fuel energy content as well as vehicle fuel economy as measured by miles per gallon (mpg) of fuel used. All other things being equal, E15 would have an energy content that is about 2% lower than other gasoline blends in the marketplace. For a vehicle getting 30 mpg this would equate to a drop to around 29.4 mpg.*
- Q. Will E15 be more expensive?
A. *Many factors go into the retail price of motor fuels. Also marketers and their trade associations cannot discuss pricing of products. However, in June 2012 the price of ethanol was more than \$0.50 per gallon cheaper than gasoline, so it is likely that E15 will actually be cheaper.*
- Q. Where can I get more information about E15?
A. *A website: www.e15fuel.org has been set up for consumers to find additional information on E15.*