

Ethanol Myths

Common Questions Regarding Ethanol Use

Q: Does ethanol plug fuel filters?

A: When ethanol first came into use, it was put into older vehicles that had fuel systems that had become varnished over a period of use. Ethanol began to clean the varnish from tanks, fuel lines, and carburetors. This did cause fuel filters to plug. Once the fuel system was clean, this problem was over. Today detergent gasolines help keep fuel systems clean and, in most cases, ethanol fuel is put into clean fuel systems; therefore, the problem no longer exists. All gasolines sold today have detergents added to their composition.

Q: Is ethanol bad for certain fuel system components in fuel pumps and carburetors?

A: Early on, some elastomers (rubber-like parts) and metal in these fuel system components did deteriorate over time. Very quickly manufacturers changed these fuel system components to be compatible with ethanol fuel. From time to time, this myth begins to circulate again, but it is not true. Today, all vehicle manufacturers, domestic and foreign, approve the use of ethanol fuels.

Q: Doesn't the use of ethanol-blended fuel cause a decrease in fuel mileage?

A: There are so many variables that relate to fuel mileage, such as the season, the weather, how the vehicle may be driven, etc., that it is hard for the average vehicle owner to accurately check fuel mileage. Every vehicle is somewhat different in driveability characteristics, as well. Some carbureted vehicles that run rich may experience an increase in fuel economy. The most current information derived from controlled environmental testing is that on fuel injected vehicles, fuel mileage may decrease by approximately 2%. A vehicle that averages 30 MPG on the highway would average 29.4 MPG using ethanol-blended fuel, a small price to pay for a cleaner environment.

Q: Won't ethanol-blended fuel attract moisture to my fuel system?

A: All of today's automotive fuel systems are closed systems and cannot attract moisture. Ethanol will absorb moisture that is in a fuel system and carry it out in suspension as it is consumed. The most likely cause for water in gasoline today would be

from service station storage tanks, a problem that is very rare. If water content becomes too high in ethanol fuel, it will separate and fall to the bottom of the vehicle's fuel tank. When ethanol fuel is used in a vehicle, no winter de-icer is required.

Q: Does ethanol cause injectors to plug in port fuel injector vehicles?

A: This theory was never proven. Earlier fuel injectors of the pintle design could form deposits that changed the pattern of the injected fuel. This problem developed from injectors seeping fuel when the vehicle was not running. This formed carbon deposits on the pintle and caused even more leakage. This could happen with any gasoline. Because of this problem, injectors in most vehicles have been re-designed around the popet style and all gasoline is required to carry a detergent component to alleviate the deposit problem.

Q: Does ethanol cause vapor lock on hot days?

A: Today, fuel vapor pressure is regulated by the EPA with a lower vapor pressure for summer grades of fuel. In this area of the Midwest, ethanol fuel may carry a one pound higher vapor pressure than conventional gasoline. Occasionally, a vehicle may vapor lock on a hot day, but this problem has mostly been eliminated.*

Q: Does ethanol use cause injector failure?

A: This seemed to be a problem on certain vehicles from 1988 to 1993. The manufacturers changed the injector coil insulation. It appears that this problem does not exist on late model vehicles.

Q: Isn't ethanol fuel blended to over 10% many times?

A: Overblends of oxygenates in gasoline are rare and never intentional. Ethanol, MTBE and other ethers all cost significantly more than gasoline. To overblend even 2% results in increased production costs exceeding 1¢ per gallon. Manufacturers of oxygenated gasolines are very cautious not to overblend and most now use very sophisticated equipment to achieve precise blend levels at or below maximum permitted levels.*