



ETHANOL FACT SHEET

What is Ethanol and how will it affect my engine?

Ethanol is a clean burning, renewable alcohol product made from fermented agricultural products such as corn. By containing oxygen, it helps gasoline burn cleaner and more efficiently, and is safe to use in any type of engine. Many manufacturers in fact recommend reformulated gasolines such as those that contain ethanol. Tests have shown that ethanol does not increase corrosion, nor harm any valves or seals.

Will Ethanol clog my fuel filter?

By and large, this will not occur. As ethanol is a very clean burning fuel with some detergent properties, these detergents will work to reduce buildup and keep your engine running smoothly. However, ethanol can loosen residues and contaminants that have been left by previous gasoline fills, particularly in older tanks. These can collect in the fuel filter and are easily corrected by changing the fuel filter.

How will my boat's fuel injection system be affected?

Ethanol aids in keeping fuel injection systems clean so they can perform better and more efficiently. Problems with fuel injection plugging are the result of dirty fuel, not ethanol. Some gasolines today do not, by themselves, contain enough detergent additives. Therefore, ethanol is also valuable as a cleaning agent that helps prevent problems.

What is the effect of using ethanol-blended fuels on fuel economy?

Changes in fuel economy are minimal. While a 10% ethanol blend contains about 97% of the energy of 'pure' gasoline, this is compensated for by the fact that the combustion efficiency of the ethanol-blended fuel is increased. The net result is that most consumers do not detect a difference in their fuel economy.

What is the number one concern I should have in switching to Ethanol?

Water in the tank. Even a very small amount of water will cause Ethanol to separate from the fuel, making the gasoline unusable.

Is it OK to mix gasolines containing Ethanol with gasolines containing MTBE?

No problems are anticipated with engine performance when mixing gasolines with different oxygenates.

What does research say about ethanol-blended fuels?

The American Institute of Chemical Engineers compared ethanol-blended fuel to straight gasoline. In a published report, the institute said ethanol was "very similar in [performance] characteristics to straight gasoline, except that pre-ignition and dieseling (run-on) are noticeably

reduced and acceleration can be improved” with ethanol. The report continued, “ethanol should be looked at as an octane enhancer. Mixing it with gasoline in a 9 to 1 ratio improves the octane rating about three octane numbers.” Those tests found ethanol completely safe to use in all types of engines.