New Government Lab Research Confirms Ethanol Blend Fuels Are Better for Large and Small Engines

National Renewable Energy Laboratory reaffirms the value of ethanol for internal combustion engines and validates Mercury Marine's 2011 findings

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AUTO CENTRAL - September 22, 2016: One of the top myths used by the oil industry against ethanol is the fantasy that ethanol sucks water right out of the air and causes phase separation to occur in the fuel tank of an idle car. The claim is that the phase separation then interferes with engine ignition and combustion, which may also lead to water-related corrosion problems with an engine's metal parts.

A report just released by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) verifies, once again, that gasoline is the cause of phase separation and that ethanol works to prevent and solve problems that can result from having water present in a gasoline

fuel tank and system. Ethanol "...can help keep fuel systems 'dry'." (The complete study summary can be found by CLICKING HERE.)

Water can enter a vehicle's fuel tank three ways: Fouled gasoline, error, and condensation. Condensation, a naturally occurring event, is the primary manner through which water can collect. Water does not form in a fuel system via magic transformation. In their 2011 webinar, THE MYTHS OF ETHANOL AND FUEL CARE, Mercury Marine succinctly put it when they stated "There is no active transfer mechanism for ethanol molecules to reach out and *grab* water molecules out of the air." The NREL affirms Mercury's statement.

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The NREL report confirms that an ethanol-gasoline blend can last 3 times longer than ethanol-free gasoline in a fuel system, including its use in small engines. This confirmation flies directly in the face of all fallacious claims about how harmful ethanol-gasoline blends can be to lawn mowers, chipper-shredders, chain saws, and small marine and motorcycle engines. The report also confirms that higher ethanol-level blends are even more beneficial in mitigating water problems.

It is possible that the presence of too much water can overtake the level of ethanol in a given ethanol-gasoline blend, and the NREL report states this. However, it is abundantly clear that ethanol-free gasoline has virtually no water tolerance, and so if the quantity of water was so great that the ethanol couldn't "hold" the water, there would be absolutely no chance for the engine to operate properly on ethanol-free gasoline.

The most unbelievable part of this all this is that there are people in America and around the world who claim to be experienced engine mechanics, chemists, or automotive enthusiasts who refuse to accept this most basic information. They argue against it as if they have never operated an internal combustion engine. I come across these people literally every single day. Common sense alone should tell these people that if the answer to fuel freeze problems is to add alcohol to your fuel tank, then using an ethanol-gasoline blend offers the same benefit.

The NREL report also addresses the issue of what is commonly called "stale gasoline." Ethanol opponents blame ethanol for contributing to gasoline's loss of quality over a period of time. However, the report states that "gasoline weathering, which can have a negative effect on fuel quality, generally occurs well in advance of any issues related to phase separation." Therefore, since phase separation occurs much later with an ethanol-gasoline blend than with ethanol-free gasoline, the potential of gasoline staleness is greatly reduced when ethanol is blended into gasoline.

The fun part of all this will be to see how the oil industry spins the report's findings and what kind of ridiculous new lies they invent to try and contradict it.

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