



IMPORTANT NOTICE

to Fuel Safe customers and distributors

UNLEADED RACE FUEL WITH ETHANOL

Many States in the USA have recently banned the use of the octane enhancer “MTBE” in unleaded gasoline formulations. Major oil companies are now replacing the MTBE “oxygenate” with an alternative anti-knock additive known as “ethanol” or “ethyl alcohol”. Most of these new gasoline blends end up as 85 to 90% unleaded gasoline and 10 to 15% ethyl alcohol (ethanol). Europe and Asia are expected to follow suit and introduce their own ethanol oxygenated gasoline formulations.

Typically fuel-system components such as hoses, pump diaphragms, seals, filters and fuel cell bladders are specifically designed for **either** gasoline **or** alcohol, but **not both**. Some of these components may suffer exaggerated degenerative effects from higher alcohol concentrations.

Also significant is the fact that gasoline and alcohol do not mix well, and with exposure to low temperatures, water, and gravity, they may experience “phase-separation”. The heavier **alcohol may sink to the bottom of a bladder**, while the lighter gasoline portion may float to the top. This could effectively increase alcohol concentrations.

It is Fuel Safe’s opinion that elevated alcohol concentrations could damage gasoline-type fuel bladders. As of this writing, Fuel Safe knows of no accidents or leaks caused by damage from ethyl alcohol, but the company is taking a pro-active stance, and you can help:

- 1.) Fuel Safe suggests that racers drain the fuel bladder after each race or practice.**
- 2.) Fuel Safe encourages teams or individuals to frequently inspect all of your fuel system components, including the bladder’s interior, for any sign of fraying, wrinkling or blistering.**

Fuel Safe also has a toll-free contact, Mr. Harold Lawrence, **800-433-6524 ext. 240** whom can receive, inspect, and evaluate any competitor’s Fuel Safe fuel bladder at no charge.

Please spread the word about ethanol and fuel system components to your fellow racers. Also, please report any negative inspection findings to the component manufacturer and also to the fuel supplier.

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