You’re at the marina. You’re ready to fill your boat with gas. You approach the pump and you see that familiar slogan: *Does not contain ethanol.*

That sounds like something bad, doesn’t it? Like *Contains no gluten,* or *This product is non-toxic.*

So what’s so bad about ethanol? Myths about ethanol fuel have run rampant, and for many, it can be difficult to distinguish fact from fiction. So let’s take a closer look at this biofuel: What it is, how it impacts boaters, and whether or not you should be using it.

Let’s start with the basics. What is ethanol? Well, if you’ve ever treated yourself to a distilled beverage, spirit, or liquor, you’ve consumed ethyl alcohol. That’s ethanol. The substance is produced from organic matter, such as corn, wheat, sugar cane, grass, et al. Ethanol was used in fuel more than 100 years ago—in fact, the Ford Motor Company’s first car, the Model T, was powered by ethanol gasoline made from corn, which is still the #1 ingredient of gasoline containing ethanol sold in the U.S. today.

In the early 2000s, the popularity of ethanol began to expand as an oxygenating agent for gasoline, replacing MTBE. It’s typically added to fuel in order to reduce the hydrocarbon emissions that cause air pollution. Ethanol/gasoline blends are now available at most service stations around the United States; nearly all of the gasoline sold in the U.S. contains about 10 percent ethanol, and it burns safely in all cars, trucks and boats.

Then there are the high-level ethanol-blended fuels: E10 (10% ethanol, 90% gas), E15 (15% ethanol) and the popular E85, which can refer to an ethanol-gasoline blend that typically contains anywhere between 51% and 80% ethanol. E85 is intended only for engines that

*Speedboat* dispels some of the myths and misinformation surrounding boat racer’s fuel of choice.
The Truth About Ethanol

What the experts say:

Dan Schwartzkopf

A pioneer in the marriage of ethanol and racing, Schwartzkopf started racing ethanol with a street car and progressed into drag racing. He was owner of a six-car NHRA drag-racing team, and at one point owned his own ethanol facility. He has helped get ethanol approved for other motorsports, such as a compact series, Indy car, tractor pulls, and raceboat series. Today he works directly with race teams and helping them transition into ethanol-based fuels.

As someone who brought ethanol into the racing world, I think we’ve proven it to be a superior fuel as far as power, octane and emissions. Emissions is a critical part of the equation, because it’s so much healthier. It’s not a carcinogen. Gasoline and methanol fuels contain a lot of carcinogens; ethanol does not.

I’m working right now with a group of people who compete in road rallies on a 27-mile course. Right now, some are using a methanol/gasoline blend, and we’re working on converting them over to ethanol because of the power enhancement that they gain. With ethanol, we have a slogan: “Good for the air, good for the engine, good for the environment.” But we also work with boats, so we should add: “Good for the water.” Because if you happen to tip a boat and the ethanol goes into the water, it’s biodegradable and non-toxic, so it’s not going to kill anything.

We absorb ethanol when we toss back a Jack Daniels. That’s a grain-based alcohol. There are no hydrocarbons, so there are emissions benefits over gasoline. It’s a low-risk fuel as far as health factors—not only for us, but for the air, plants and the rest of the environment. That’s probably the most important factor, aside from the performance gains you get. And we’re not just talking about little gains—in the performance world, some of these racers are recognizing anywhere from as little as 40 hp on a real precision motor, clear up to 300 hp. If you’re building an engine from the ground up, we consider a number of specific issues: air-fuel ratios, ignition that it takes to light the fuel, crankcase pressures, etc. Every motor is different—turbo, naturally aspirated, blown. Each individual’s setup is different.

I think ethanol has become a predominant fuel of the future because of its characteristics—lower cost, environmentally friendly, you get more power and torque. Unfortunately, people don’t like a lot of change. But once they’re able to see the benefit of ethanol, it’s a whole new world—just ask Gary Smith, Don Onken and Keith Holmes. They’ve all had huge success using Ignite Racing Fuel.
This year, American Ethanol is sponsoring Cat Can Do, owned by Keith Holmes (right).

have been specially geared to accommodate high-ethanol content fuel blends, and its availability at service stations across the country has grown briskly in the last few years.

If you operate a competitive raceboat, chances are decent that you have used (or are at least aware) of E85. Probably the most famous promoter of this type of fuel is Don Onken’s 50-foot Mystic offshore competitor American Ethanol, powered by quad 1,700+ hp alcohol-burning motors. It’s the boat that nabbed top honors at the 2015 Lake of the Ozarks Shootout with a top speed of 208 mph with driver Myrick Coil and throttleman John Cosker; the Top Gun winner was also pictured on the front cover of the November 2015 issue of this magazine.

The term “American Ethanol” refers to the marketing campaign dedicated to increasing awareness of the performance capabilities—and affordability—of ethanol made in the U.S.

This year, American Ethanol is sponsoring the Skater offshore racer Cat Can Do, with additional sponsorship from Ignite Racing Fuel of Marion, IN. Ignite makes and sells a variety of fuels and lubricants, including its own E-85 blend that offers what it describes as a “true” consistency (E85 can legally contain as little as 51% ethanol). In addition to its high-level ethanol fuels, Ignite also makes and markets a variety of high-performance lubricants.

One of the most vocal in persuading boaters to convert to high-ethanol fuels—while dispelling the many myths about them—is Ignite Racing Fuels President Jay Berry, who underscores that ethanol can accommodate significantly higher compression ratios than...
The Truth About Ethanol

The ethanol industry provides jobs in agriculture, construction, operations and maintenance, mostly in rural communities.

What the experts say:

**Carson Brummett**

The son of legendary Mandella Boats founder Lou Brummett, Carson operates Brummet Marine in Pasadena, CA. A builder of big-horsepower engines, he has converted several raceboats to accommodate E85 fuel.

Ethanol has its pluses and minuses. For making horsepower in a turbocharged or supercharged engine, it’s very good. The boat has to be set up for it, with all Teflon fuel lines, and the filters and fuel tanks have to be compatible with ethanol and so forth. But everything’s good with it. The downside with a pleasure boat is that you’re going to use a third more of it than with regular gasoline. So if your boat barely has enough capacity and you’re going out for the day, you might be hurting with E85. And if you have a big turbocharged motor, you will be changing the oil more frequently. But if the fuel mapping is correct, it’s not too much of a problem. It definitely works. We’ve been running it since around 2001 and we’ve converted a lot of people over to using it. Sterling Engines was never going to use it—they hated it—but last year even they started using it!

Ethanol definitely has its applications. You can certainly make more power with it, but it’s like anything else—you have to have the right combination to make it work correctly. We still do the PSI blown motors like Don London has. I believe this will be his fourth season using those. Last year we did Gary Smith’s Whipple motors in the Predator, and we’re working on some new turbo engines right now for a customer in Kansas. Those are all going to be E85-compatible.

Two 388 Skaters that run engines built by Carson Brummet: Don London’s (top) and Jon Roth’s (above).
gasoline. “Ethanol likes to be squeezed—that’s why we’re seeing massive horsepower gains with the boat racing crowd. The more compression and the more air flow you can get to it—that’s where we really blow the doors off of gasoline or racing gas,” he says.

According to Berry, many in the boating industry still resist going to higher ethanol fuels based on faulty information. “We want to dispel the myths,” he says. “Among the misperceptions with ethanol and pump E85 is that it’s plugging a boat’s injectors. It’s not—it’s a cleaner.” The real problem with E85, he says, is that it’s a misnomer, because the blend can contain as little as 51% ethanol. “As long as you have 51% ethanol, that’s all the government cares about,” he says. “The oil companies can blend with it whatever they want to blend. That’s where all these issues about ethanol being bad come from—that’s all because of what the oil companies blend with it. A lot of oil companies can get rid of waste out of their refinery by blending it with the ethanol.”

The solution, he says, is to rely on “true consistency” fuels like Ignite’s, a true E85 blend containing 85% ethanol and 15% denaturant every time, every barrel. It burns cleaner and cooler to extend the life of an engine while providing more torque and power for the speed.

“Another misconception about ethanol is that its production reduces our food supply,” Berry says. “That’s actually not true, because a third of the corn comes back. What’s left is very high-protein feed, so dairy cattle who go on it actually gain an extra gallon of milk production because of it. All we do is pull the starch. The high-protein feed that the animals actually need and is better feed for them.”

Among the benefits of ethanol: If a boat catches on fire the fuel gets dumped in the water, ethanol is 100% biodegradable. Ethanol has lower emissions than gasoline.

Other myths about ethanol:

- **Ethanol requires too much water to produce.** Not true—the amount of water required to produce ethanol is on the decline.

- **Ethanol needs more energy to make than it yields.** Again, not true: ethanol production has steadily become more energy-efficient.

So should you switch over to a higher-ethanol fuel? For boaters, some components (gas tank, fuel lines, injectors, carburetors) will need to be checked out by a professional and possibly converted. For offshore racers looking for a competitive edge, that may be worth doing. Performance gains notwithstanding, boosting your ethanol levels will unquestionably be better for the environment. “Ethanol burns cooler, but it also burns cleaner,” Berry says. “And some racers have told me that it cleans your engine to look like brand new. Guys who used to have to refresh their engines two to three times a year that now can go a whole year without doing it. Some go as long as two years without having their engine torn down.”