

## MARINE USE:

E10 is the oxygenate of choice in some water-recreation areas because of its clean air and water benefits.

Ethanol is safe for use in:

- Two-Stroke Powered Engines
- Motorboats
- Outboard Motors
- Inboard Motors

To date, tests have shown no problems using E10 when the manufacturer's recommendations are followed. The National Boat Racing Association (NBRA) uses E10 at all races in their two-stroke motors. Always confirm with your owner's manual from the manufacturer if you are unsure.

### I see other ethanol blends such as E20 and E85. Can I use these products in my marine engines?

No. These fuels are for use in flex-fuel vehicles (FFVs) only. These automobiles are specifically designed to be able to operate on ethanol-blended fuels ranging from unleaded gasoline to E85 (85% ethanol, 15% gasoline), and all mid-level blends in between.



More information on ethanol and boating is available on:  
[www.ChooseEthanol.com/boating](http://www.ChooseEthanol.com/boating)



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# Ethanol and Marine Use



## ETHANOL USE:

America's drive to reduce its dependency on foreign oil has led to a rapid expansion of ethanol-blended fuel. Today ethanol can be found in nearly all of the nation's gasoline and is presently being utilized in all engine types, including marine engines.

## E10:

Throughout 2010 fuel blenders extended the availability of fuels containing up to 10% ethanol (E10) to many new regions of the U.S., primarily the southeast states. E10 is interchangeable with gasoline and virtually every gallon of gasoline sold in the U.S. today contains a percentage of ethanol up to 10%.

Only E10 should be used as fuel for marine engines and watercrafts, not E15 or any other higher blend fuel. Until fuel blends containing more than 10% ethanol have been tested and approved for use in marine engines, watercraft and boat owners should not use these higher fuel blends.



## ENGINE PERFORMANCE:

**Ethanol provides high octane for exceptional engine performance and reduced emissions.**

Need proof? Just ask the National Boat Racing Association (NBRA), they are using E10 exclusively for all their races. Go to: [www.racembra.com](http://www.racembra.com).

There are over 12 million recreational boats in the United States, some of which are vintage watercraft. Regardless of make and model, most watercrafts can operate on E10.

Ultimately, your watercraft operator's manual should be consulted. Remember, a wealth of information on your marine equipment is available to you on the internet as well.

**Honda, Kawasaki, Mercury Marine, OMC (Johnson/Evinrude), Pleasurecraft, Tigershark (Artco), Tracker and Yamaha allow the use of ethanol fuels in their products. As an example, Mercury Marine has indicated that their outboard products, produced after 1979, should not have problems operating on ethanol.**

## FUEL DETERIORATION:

**As a regular maintenance item and prior to a boating trip, check for water contamination of the fuel tank.** If any water is found, remove all of it and dry the tank completely before re-fueling.

Also, since E10 can absorb moisture, it is important to have a tight fitting cap on both your equipment fuel tank and any gasoline storage containers. Any phase separated material should be handled as hazardous waste and properly disposed.

Sources: [www.EthanolRFA.org](http://www.EthanolRFA.org)  
[www.ChooseEthanol.com](http://www.ChooseEthanol.com)



## FACTS ABOUT E10, WINTERIZATION & STORAGE:

- Adding ethanol does not shorten the shelf life or stability of motor fuel, nor does it affect the fuel combustibility.
- Winterization techniques from the fuel storage perspective are typically identical for gasoline and E10 fuels with some additional warning as to water or condensation contamination for ethanol-blended fuels. Having your watercraft prepared for storage by an authorized facility is always the preferred method for winterizing.
- Additional fuel storage recommendations, specific to your geographic location, may be available from the local, authorized marine servicing dealer.

For more information on Ethanol & Marine Equipment, go to: [www.ChooseEthanol.com/boating](http://www.ChooseEthanol.com/boating).