

IERCURY

OUTBOARDS



No. 90-11

## USA and Canada Gasoline Recommendations – Mariner and Mercury Models

## 35 HP thru V-6 Outboards

**REGULAR LEADED OR UNLEADED (LEAD-FREE) AUTOMOTIVE GASOLINES WITH A MINI-MUM PUMP POSTED OCTANE RATING OF 87 ARE SATISFACTORY FOR THESE OUTBOARDS.** Mid–grade or premium grade unleaded automotive gasolines are recommended for added internal engine cleanliness. Hi–Performance models refer to the gasoline recommendations furnished with those engines.

## 2 thru 30 HP Outboards

ANY GOOD GRADE GASOLINE, REGULAR LEADED OR UNLEADED (LEAD–FREE) THAT WILL SATISFACTORILY OPERATE AN AUTOMO-BILE, IS SUITABLE FOR USE IN THESE OUT-BOARDS. Mid–grade or premium grade unleaded automotive gasolines are recommended for added internal engine cleanliness.

Avoid gasolines containing alcohol, either methyl alcohol (methanol) or ethyl alcohol (ethanol) which may cause increased:

- Corrosion of metal parts
- Deterioration of elastomer and plastic parts.
- Fuel permeation through flexible fuel lines.
- Wear and damage of internal engine parts.
- Starting and operating difficulties.
- Lean operation due to decreased energy content.

Some of these adverse effects are due to the tendency of gasolines containing alcohol to absorb moisture from the air, resulting in a phase of water and alcohol separating from the gasoline in the fuel tank

The adverse effects of alcohol are more severe with methyl alcohol (methanol) and are worse with increasing alcohol content

## **WARNING**

FIRE AND EXPLOSION HAZARD: Fuel leakage from any part of the fuel system can be a fire and explosion hazard which can cause serious bodily injury or death. Careful periodic inspection of entire fuel system is mandatory, particularly after storage. All fuel components including fuel tanks, whether plastic, metal or fiberglass, fuel line, primer bulbs, fittings, fuel filters and carburetors should be inspected for leakage, softening, hardening, swelling or corrosion. Any sign of leakage or deterioration requires replacement before further engine operation.

Because of possible adverse effects of alcohol in gasoline, it is recommended that only alcohol– free gasoline be used where possible. If only fuel containing alcohol is available, or if the presence of alcohol is unknown, increased inspection frequency for leaks and abnormalities is required.

IMPORTANT: When operating an outboard engine on gasoline containing alcohol, storage of gasoline in the fuel tank for long periods should be avoided. Long periods of storage, common to boats, create unique problems. In cars, alcoholblend fuels normally are consumed before they can absorb enough moisture to cause trouble, but boats often sit idle long enough for phase separation to take place. In addition, internal corrosion may take place during storage if alcohol has washed protective oil films from internal components.