PRODUCT INFO DATA SHEET



NARNE PETROL TREATMENT ADVANCED FORMULA WITH ETHANOL DEFENCE



WHAT ARE THE PROBLEMS WITH TODAY'S FUEL?

The marine industry is made up many groups from the recreational person on the weekend, to the professional business person on the high seas and those who support the industry.

Purchasing a marine craft is a huge investment and can have ongoing costs including running costs, maintenance and repairs. Some, if not most are caused by fuel. The amount of non-ethanol fuel available across the country continues to decrease, which means the only option is Ethanol based fuels. This is not good news for boat owners who treat their boats with care.

With ethanol fuels it is important to watch out for these three marine fuel problems:

1. Ethanol attracts moisture. Considering most boats spend a lot of time on the water, the fuel quality gets destroyed as the petrol absorbs too much water and phase separation occurs. This leaves you with a layer of alcohol and water at the bottom of the tank.

2. Once some or all of the alcohol drops out, the octane rating in the fuel is reduced by up to 3-4 octane points. Depending on the quality of the fuel, this could determine if the fuel is useable or not.

3. Most people associate bacteria and fungal growth with diesel fuel, but they can just as easily grow in petrol. Since ethanol fuels attracts water, it has the perfect conditions for the fuel microbes to grow in. With the presence of both water and microbes, there is a greater chance of unexpected corrosion damage to your boat.

The Department of the Environment has announced new emissions standards for non-park ignition marine engines – outboards, inboards and PWCs as of the 1 July,2018. The issue and the reason for the impending new standards is the very high exhaust emissions of the old two strokes outboards that blow clouds of blue smoke at start up. An old 8hp carbie two stroke engine will produce more emissions per hour than a 150hp four stroke. Of course, the proposed emissions standards are not restricted to outboard engines, but will apply to new petrol or marine engines, including stern drives, inboard engines and personal watercraft. Marine tanks systems will come under scrutiny as well.

WHAT DOES THIS MEAN FOR THE EVERYDAY BOATIE?

By using the Marine Petrol Treatment with Ethanol Defence, you will have

- · less carbon build-up on spark plugs resulting in easier starting
- reduced exhaust emissions entering the waterways
- substantial reduction in two stroke fuel mix separation, as well as
- reduction in fuel tank water problems.

In summary you could expect up to a 12 % reduction in fuel burned with easier hot and cold engine starting.

Pro-Ma Performance Marine Petrol Treatment now with Ethanol Defence represents what we believe to be the finest petrol treatment in the world today.

PRODUCT INFORMATION

Marine Petrol Treatment with Ethanol Defence is a multi-function treatment that solves petrol/gas and ethanol fuel related problems with a detergent, lubricant, surfactant blend, deposit control agent and combustion modifier.

Formulated for use in unleaded fuel in all petrol/gas engines (carburetted, fuel injected turbo-charged, 2 stroke or 4 stroke), Marine Petrol Treatment with Ethanol Defence is a powerful, technologically advanced additive that can assist with easier starting, reduce unwarranted maintenance, reduce exhaust emissions and save fuel costs.

Now with Ethanol Defence, it is ideal for use with ethanol-based fuels. Our Ethanol Defence component combines multi-function mileage and performance enhancing features with ethanol protection, superior detergency and the most powerful of water absorbing ingredients available. It solves water problems in ethanol without alcohol.

Marine Petrol Treatment with Ethanol Defence is ideal for all marine vehicles as it does not contain any phosphorus or metallic compounds that harm the catalytic converter. By reducing the unburnt hydrocarbon and monoxide input, Marine Petrol Treatment actually increases vehicle life and reduces maintenance costs.





FEATURES & BENEFITS

By using the Marine Petrol Treatment with Ethanol Defence, you will have

1. SURFACTANT

The Ethanol Defence component in Marine Petrol Treatment will work immediately to remove water in treated fuel and prevent its build up.

Ethanol fuel pulls water into the fuel wherever it is. This can cause the ethanol to separate from the fuel, stripping the octane from the fuel and leaving a layer of poor quality fuel on top, and ethanol + water on the bottom. If burned, this can cause substantial performance problems and engine damage expense. Marine Petrol Treatment with Ethanol Defence keeps the droplets in suspension and removes water, slowing down the fuel burn rate. The result is more complete combustion and enhanced removal of carbon deposits from the combustion chamber.

This is more evident in 2 stroke engines where the ethanol blends can prevent the lubricating oil mixed in fuel to bond to the engine surfaces providing proper lubrication.

Marine Petrol Treatment's blend of stabilizers and water-controllers attack the common causes of ethanol fuel instability; phase separation from water and fuel oxidation. Stored ethanol blends treated with Ethanol Defence stay usable for longer periods of time, with stabilised fuel.

You can trust the Marine Petrol Treatment advanced formula with Ethanol Defence to keep your valuable petrol powered marine engine and equipment running at peak efficiency throughout their life span without out the use of alcohol.

2. DETERGENT

Marine Petrol Treatment with Ethanol Defence has detergent and deposit control agents that will clean the injectors by removing carbon, varnish and gum deposits, clean fuel injectors and carburettors, eliminate sticky valves and piston rings, clean the entire fuel delivery system and combustion chamber, and restore performance to your vehicle by extending spark plug life, at the same time. Therefore improving compression, lowering cylinder head temperatures, helping seat piston rings, stopping premature detonation and reducing blow-by.

3. TOP OIL - LUBRICATION

Marine Petrol Treatment with Ethanol Defence's super lubricant coats the entire fuel delivery system to protect these parts against corrosive ethanol solvency and prevent wear and corrosion in fuel tanks and exhaust systems. It also lubricates the upper cylinder area, extending engine life, reducing wear and protecting critical engine parts. Increased lubrication caused by coating valves, valve seats, lower exhaust valve guides and upper piston rings, keeps top rings working freely and lubricates injectors, carburetors and fuel pump diaphragms for added protection against ethanol effects. It also prevents corrosion in fuel tanks and exhaust systems.

Ethanol fuel blends dissolve rubber, plastic and resin materials wherever the fuel comes in contact. When ethanol dissolves rubber and plastic, those resins are carried in the fuel and deposited into critical areas to cause performance problems and raised emissions, just like regular carbon deposits. Our superior lubricant coat's these parts providing exceptional protection.

4. OCTANE ENHANCER

Enhances burn regardless of fuel octane rating. Reduces pinging and detonation.

5. COMBUSTION MODIFIER

The combustion improvers in Marine Petrol Treatment with Ethanol Defence minimises pre-oxidation of the fuel in the combustion chamber prior to the spark igniting the fuel mixture. This increases fuel combustion efficiency and horsepower because more fuel is now available for burning at spark ignition.

This also improves fuel consumption and mileage, lowers emissions, improves performance and promotes smoother running engines, and assists with hot starts issues.

6. ETHANOL DEFENCE

Marine Petrol Treatment with Ethanol Defence removes water in treated fuel and prevents its build up. It stabilises ethanol blends, making them usable for longer. Ethanol Defence protects against ethanol damage and provides superior upper cylinder lubrication, helping to improve usage and performance by up to 12% or more.

Ethanol Defence combines proven combustion improvement, detergency and alcohol free ethanol protection with the best professional strength water-absorbing ingredients that lands a knockout punch without alcohol for the ultimate in high performance.

DOSAGE

Marine Petrol Treatment with Ethanol Defence should be added directly to the fuel tank, preferably just before refuelling.

The recommended ratio

40mL : 25 litres of petrol

For <u>bulk</u> storage tanks

1 Litre : 625 litres of petrol

For ease of application use EZY-POR.

The Marine Petrol Treatment with Ethanol Defence quickly disperses throughout the tank. Consistent use can keep tanks clear of water and deposits. Marine Petrol Treatment with Ethanol Defence assists in stabilising fuel.

COMPOSITION

Marine Petrol Treatment with Ethanol Defence is a balanced compound of ashless organic materials in a pure hydrocarbon solvent. Marine Petrol Treatment with Ethanol Defence is completely soluble in petrol.

· Control water and condensation in tanks, lines and filters



SPECIFICATIONS

Specific Gravity @ 15.5°C (60°F)	0.797
Viscosity SUS @37.8°C (100°F)	
Pour Point	
Colour	Amber
Initial Boiling Point	159°C (318°F)
Final Boiling Point	204°C (400°F)
Ash Content @ 500°C (932°F)	Less than 0.005%

NOTE: Marine Petrol Treatment with Ethanol Defence CONTAINS NO METHANOL, ETHANOL, OR ISOPROPANOL ALCOHOLS.

HANDLING

Contains petroleum distillates. Do NOT store near heat, sparks or flame. Wash with soap and water if product contacts skin. KEEP OUT OF REACH OF CHILDREN. A Safety Data Sheet is available from Pro-Ma Systems.

WARNING

Combustible. Harmful or fatal if swallowed.

MEDICAL ADVICE

Contains petroleum distillates. If swallowed, do NOT induce vomiting. Call a doctor immediately.

AVAILABLE SIZES

500mL 5 Litres 20 Litres 60 Litres 208 Litres

EPA APPROVED USA

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