

3000

Phaser 3000

Ethanol Gasoline Fuel Stabilizer

DESCRIPTION:

A modern fuel stabilizer, Phaser 3000 is recommended for use in gasoline or diesel* engines to increase performance, reduce downtime, clean, neutralize the harmful effects of engine acids, remove carbon, gum, sludge, and varnish from valves, cylinders, pistons, fuel injectors and carburetors.

When ethanol blended gasoline reaches its saturation point because of contamination with H₂O, multiple layers are formed. The top layer is gasoline with a lower octane rating, and the bottom is a mixture of water and ethanol that will not ignite during engine combustion. If ethanol blended gasoline reaches this state, a phenomenon known as "Phase Separation", the engine can be detrimentally affected. This is where Phaser 3000 is necessary because it can actually return these separated layers back to one clear, homogeneous mixture. In this process, Phaser 3000 absorbs H₂O molecules in the phase separated gasoline by breaking the ethanol-water "H" bond and encapsulating the H₂O molecules, thus returning the separated layers back into one mixture. The H₂O molecules that are absorbed in Phaser 3000 are then eliminated during the normal combustion process of an engine.

COMPOSITION:

Phaser 3000 is a unique combination of specially blended, proprietary components including:

- Reverse Phase Additives
- Water Absorption Additives
- Rust Inhibitors
- Dispersant Additives
- Oxidation Inhibitors
- Cleaning Additives
- Corrosion Inhibitors
- Acid Prevention Agents

PERFORMANCE

CHARACTERISTICS:

- Absorbs H₂O
- Prevents & Reverses Phase Separation
- Prevents Rust & Corrosion
- Fights Ethanol Problems
- Optimizes Marine Engine Performance
- Provides Seasonal Storage Stability
- Improves Combustion
- Reduces Fuel Waste and Emissions
- Prevents Harmful Engine Acids
- Increases RPMs
- Reduces Sticking Valves
- Cleans Fuel Injectors and Carburetors
- Eliminates Carbon, Varnish and Sludge

USES:

Phaser 3000 is recommended for use in gasoline and diesel* of all grades particularly ethanol blended gasoline to prevent the corrosive effects of engine acids created during combustion – including internal combustion engines that are located in salt water and fresh water environments. It also is recommended to absorb moisture, prevent icing and stalling, remove carbon, gum, sludge and varnish deposits, improve combustion, clean injectors and carburetors, free sluggish valves, improve performance and reduce downtime and maintenance costs.

** When used as a diesel fuel additive: This diesel fuel additive complies with the federal low sulfur content requirements for use in diesel motor vehicles and non-road engines.*

Phaser 3000 is NOT RECOMMENDED for use as a lubricant or lubricant additive nor as a component of any flushing solution.

APPLICATIONS:

Gasoline Engines Marine Engines
Diesel Engines Industrial Engines



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TREATMENT RATES:

Maintenance

Phaser 3000 is recommended to provide sufficient water removal and keep-clean performance at a maintenance treat rate of 1:500 in humid or wet environments. It may also be used at a treat rate up to 1:1000.

Phase Reversal

If phase separation has occurred, the fuel is non-compliant and unusable. It may take one gallon of Phaser 3000 for every 30-100 gallons of gasoline to achieve Phase Reversal. A 1:30 separation reversal dosage is for 10% ethanol containing gasoline that has been contaminated with ½% water. Different variables – those being temperature and barometric pressure – can change the dosage needed to return a phase separated gasoline back to a homogeneous state. The amount of water and ethanol present will also affect the amount of Phaser 3000 needed to phase reverse the separated gasoline. If the percentage of ethanol in the gasoline is unknown, begin by treating the gasoline at 1:100. Continue adding Phaser 3000 if necessary while re-circulating the mixture until the phase separated gasoline reverts back to a homogeneous state. Dosages greater than 1:500 may only be used in off-road gasoline. Refer to the Phase Reversal Treatment Technical Bulletin for instructions on how to make water laden fuel with the phase reversal dosage compliant with on-road use specifications. Phaser 3000 will not rid the fuel of other contaminants that may have been introduced along with the excess water: i.e., sludge, microorganisms, foreign matter, etc.

TYPICAL SPECIFICATIONS:

Appearance	Transparent yellow liquid	Distillation, IBP, °C	170
Flash Point, °F, min.	149	Distillation, 98%, °C	172
Odor	Mild	Evaporation Rate (butyl acetate = 1)	0.06
Specific Gravity @ 20°F	0.90	Freezing Point, °F	-107
Flash Point, °F	149	Solubility in H ₂ O (by wt) @ 25°C	97%
Autoignition Temperature, °F	495		