PREMIUM SELECT ELECTRONIC TECHNICAL DATA SHEET

## 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  $H_2O$ , 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 adheres itself to  $H_2O$  molecules in the phase separated gasoline by breaking the "H" bond from the  $H_2O$  molecule and adhering itself to that  $H_2O$  molecule, thus returning the separated layers back into one mixture. The  $H_2O$  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 Rust Inhibitors Oxidation Inhibitors Corrosion Inhibitors

## Performance Characteristics:

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Absorbs H<sub>2</sub>O Prevents & Reverses Phase Separation Prevents Rust & Corrosion Fights Ethanol Problems Optimizes Marine Engine Performance Provides Seasonal Storage Stability Improves Combustion and Fuel Economy Reduces Fuel Waste and Emissions Neutralizes Harmful Engine Acids Increases RPMs Reduces Sticking Valves Cleans Fuel Injectors and Carburetors Eliminates Carbon, Varnish and Sludge Water Absorption Additives Dispersant Additives Cleaning Additives Acid Neutralizing Agents **Uses:** Phaser 3000 is recommended for use in gasoline and diesel\* of all grades particularly ethanol blended gasoline to neutralize 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.

\* This fuel additive does not comply with federal low sulfur content requirements for use in model 2007 and newer diesel motor vehicles and cannot be used in diesel for on-road applications.

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

- Applications: Gasoline Engines Diesel Engines Marine Engines Industrial Engines
- **Treatment Rates:** 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. If phase separation has occurred, one gallon of Phaser 3000 must be used for every 30-100 gallons of gasoline. 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 normal state. The amount of water and ethanol present will also affect the amount of Phaser 3000 needed to return the separated gasoline back to a normal state. If the percentage of ethanol in the gasoline is unknown, treat the gasoline at 1:100. Continue adding Phaser 3000 if necessary while recirculating the mixture until the phase separated gasoline returns back to a homogeneous state.

Specifications:	Appearance	Transparent yellow liquid
	Flash Point, °F, min.	149
	Odor	Mild
	Specific Gravity @ 20°F	0.90
	Flash Point, °F	149
	Autoignition Temperature, °F	495
	Distillation, IBP, °C	170
	Distillation, 98%, °C	172
	Evaporation Rate (butyl acetate $= 1$ )	0.06
	Freezing Point, °F	-107
	Solubility in H20 (by wt) @ 25°C	97%