

PRI: ESSENTIAL FOR FUEL SURVIVAL

When Disaster Strikes, Will Your Lights Be On?

Hurricanes - Tornados - Earthquakes - Terrorism: All pose the threat of disrupting electrical power for days, even weeks at a time. Today, more than ever, we rely on emergency standby power generation to meet real and potential threats. But how just how reliable are these systems? Fact is, they are only as dependable as the fuel they burn. That's why many of these systems ***will fail when they are most needed!***

Generators At Major Risk From Bad Fuel!

Generator manufacturers and service technicians agree that between **50-to-70%** of standby generator failures are directly attributable to ***the effects of degraded fuel quality***. In fact, engine manufacturers say many owners do not read their operating manuals, leaving them ***unaware*** that ***all fuels*** will go bad in storage - some in just a matter of ***weeks***.

The situation is worsened by the fact that in the production of today's modern fuels, new "cracking" processes have been implemented that actually cause today's "clean fuels" to ***degrade much faster*** than those produced years ago! As a result, many "consumer" grade stability additives, once adequate, ***no longer get the job done***. But there is an answer.

Stop Fuel Rot With PRI!

Originally developed for refiners, **PRI's** unique *thermal stability* chemistry is an ***industrial-grade treatment*** designed to preserve and restore even the most difficult fuels under the most challenging conditions. Why? Our industrial clients simply cannot afford fuel failures. They depend on **PRI** for complete system integrity and reliability. Among the units now relying on **PRI-D** are operators of standby generators at conventional and nuclear power plants, major ISPs like America Online, telephone companies, hospitals, and vital emergency services.

The **PRI-D** used by these facilities is also available in the same industrial strength in our smaller, consumer packages. Today, **PRI-G** for gasoline, **PRI-D** for diesel and kerosene, and **PRI-G** for small engines makes that protection available to all. With one simple treatment about every 18-to-24 months, **PRI** will keep your fuel fresh in storage for 2-to-10 years, depending on initial fuel quality and storage conditions.

Not only will **PRI** make even the freshest fuels even ***fresher***, **PRI** also restores severely degraded and stale fuels to ***refinery freshness!*** How can you be sure?

Independent Tests Confirm PRI Effectiveness

Independently conducted comparison tests of **PRI's** *industrial-grade* chemistry against other "stabilizers" confirms that **PRI** is ***unmatched*** in preserving and restoring all fuel types. Please note: The length of fuel preservation is affected by original condition of the fuel and storage conditions. For maximum protection, follow the annual re-treatment regimen.

PRI Maintains Engine Reliability

Even with fresh fuel, heavy carbon fouling is a fact of life for large stand-by and portable power generators. Reliability is compromised. Repairs are expensive. But with **PRI's** exclusive *thermal stability technology*, carbon fouling is *prevented!* Engine components remain *clean*. Fouling of fuel delivery systems is *eliminated*. This keeps your diesel or gas powered generator running faithfully for thousands of hours. After all, can you depend on repair facilities or the availability of a specialized service technician in the event of an emergency?

PRI Provides More Power, Economy

Because **PRI** actually prevents carbon mass from forming in fuel under the heat and pressure of combustion, more of the fuel burns, giving more power to your engine! This means you use less fuel to get the same level of power output, giving your engine more fuel efficiency. When every precious drop of your stored fuel counts during an emergency - **PRI** is there to help you make it through.

PRI Is *GENERAC*[®] Tested & Recommended

Long term engine tests conducted by GENERAC Power Systems Inc. confirm **PRI's** capability to prevent the hard carbon deposits which accelerate engine wear. *GENERAC*[®] also recommends **PRI** for long-term storage stability, ensuring that your power generation system will be available *when you most need it!*

PRI Is *Sea-Tow*[®] Recommended

Protecting more than 50,000 recreational boaters nationwide, *Sea-Tow*[®] cautions its members to use **PRI** in every tank to prevent potentially dangerous engine failures at sea. Not only do many *Sea-Tow* operators use **PRI** in their own rescue boats, they have found that **PRI** permits them to use older, discarded fuels by restoring these fuels to refinery freshness!

DON'T DELAY! Demand is Greater Than Ever!

PRI treatment of fuel supplies is *critical* for anyone maintaining back-up generator systems or generators for marine and RVs. To fail to heed this information could mean the *failure of your system when you most need it! Don't delay*. Demand for **PRI** from public utilities, commercial firms, emergency services and private individuals has soared in recent months!

PRI-G FAQs

Q: Will the use of **PRI-G** void my engine manufacturer's warranty?

A: No. **PRI-G** complies with the fuel specification requirements of all engine manufacturers. **PRI-G** does not alter fuel in any harmful way. In fact, **PRI-G** greatly enhances fuel stability - improving upon the minimum specifications for fuel stability required by many engine manufacturers.

Q: But my engine manufacturer does not recommend the use of fuel additives. Why?

A: Given the fact that literally thousands of fuel additives are offered on the market, engine manufacturers have no way of monitoring or testing the claims of so many products - making it difficult to determine specific products that are safe to use. However, **PRI** chemistry does not alter any fuel specifications issued by engine manufacturers - specifications by which manufacturers judge whether or not a particular fuel affects safe engine operation. **PRI** has been safely used in thousands of engine types.

Q: Does **PRI-G** eliminate water from fuel?

A: **PRI-G** only absorbs small amounts of tank condensation that can occur over a several day period. However, **PRI-G** does not absorb large amounts of water into fuel. Using a fuel treatment chemistry to absorb large amounts of water is not a good idea. Large amounts of water absorbed in fuel can severely damage fuel injectors and fuel injector pumps. It is better to remove water by either draining the tank or by using special water removal filtration systems.

Q: I have fuel that has been sitting in storage for several years. Will **PRI-G** help make this fuel better?

A: Yes. When thoroughly blended with fuel, **PRI-G** will restore even the most degraded fuels to a refinery-fresh, usable condition - provided the stored fuel does not contain metals or foreign chemistries not compatible with refined fuel. Although the fuel will be restored to usable specification, **PRI-G** does not restore the fuel to original color.

Q: How long will **PRI-G** preserve fuel freshness?

A: This depends on the initial quality of the fuel. Independent test data shows that **PRI-G** can preserve most gasolines for many years. However, it is recommended that **PRI-G** be applied to the fuel at least every 9 - 10 months.

Q: Should I use a double or triple dose of **PRI-G** for really tough fuel?

A: No. **PRI-G** is fully effective at the recommended dose rate.

Q: What if I accidentally over treat with **PRI-G** - will it hurt anything?

A: No. But it will be wasting money.

Q: I understand that **PRI-G** prevents carbon build-up. Does it remove old carbon from my engine components?

A: In older engines, **PRI-G** only removes the more newly formed, soft carbon. **PRI-G** does not remove hard carbon deposits. First, it is never wise to use any chemistry that removes hard carbon deposits in older engines. The hard carbon actually fills in worn areas in upper ring areas and valve seats. Removal of hard carbon in these cases can result in poor component-to-component tolerances - causing piston slap, poor valve seating, and other problems. However, **PRI** will still remove deposits from injector tips.

Q: Will **PRI-G** eliminate tank sludge?

A: **PRI-G** will eliminate tank sludge when consistently used. **PRI-G's** powerful dispersants are the same chemistries used to dissolve heavy, asphaltene laden sludge in the most challenging heavy fuel oils. The length of time it takes for **PRI-G** to remove this sludge is dependent upon the degree of sludge contamination. Hence, complete sludge removal may take just a few days - or a few months. For extra-heavy amounts of tank sludge, we recommend a proper tank cleaning, followed by filling with **PRI** treated fuel to prohibit future sludge formation.

Q: If **PRI** chemistry is so effective, why don't refiners put it into their fuel at the pump?

A: Refiners do put very small amounts of additives into fuel. However, gasoline marketing is highly competitive and refiners make every effort to offer fuel at the least cost. The addition of additives at their most effective dosage rates would result in higher prices - and petroleum marketers would risk losing market share.

Q: We have much cleaner gasoline today. Why would I want to use an additive?

A: By comparison, gasoline today is initially much cleaner than gasoline sold 10 or 20 years ago when it is first produced. However, today's fuels are less stable today because they are produced through cracking processes versus the less efficient "straight-run" processes used years ago. As a result, today's fuels deteriorate at much faster rates - resulting in excessive carbon build-up in your engine. Given the varying length of time it takes for fuel to be consumed after refining, it is wise to freshen fuels every tankful with **PRI-G** to ensure maximum combustion and performance.

Q: Isn't it costly to use **PRI-G** every tankful?

A: No. Because the use of **PRI-G** results in more efficient combustion, fuel economy is greatly improved. The fuel savings more than pays for the cost of treatment. In the long-term, the capability of **PRI-G** to prevent carbon deposits actually extends engine life - since it is the hard carbon with untreated fuels that accelerates abrasion and wear.

Q: Is it okay to use **PRI-G** with other additives?

A: **PRI-G** effectiveness will not be affected by other additives. However, **PRI-G** is a multifunctional product designed to overcome all fuel issues. There is no reason to use any additional additives when **PRI-G** fully does the job.

Q: Why doesn't **PRI-G** boost the octane rating of gasoline?

A: **PRI-G** uses a safer, more effective method to improve power and performance.

Q: How do I dose **PRI-G** to my tank?

A: When adding **PRI-G** for the first time, estimate the entire tank capacity and treat for that amount. Put **PRI-G** into tank just prior to fueling when tank is 1/4 to 1/2 full. Immediately add fuel. On follow-up dosing, simply estimate the amount of fuel to be added, treat the tank, then immediately add fuel. **PRI-G** must be added at the time of fueling to work properly. If you put **PRI-G** into the tank, drive to the pump, then add fuel, **PRI-G** will have been fully activated only with the fuel it originally touched. For consumers, **PRI-G** bottles have E-Z measuring dosing reservoirs to permit accurate dosing. For tank sizes of 5,000 to 10,000 gallons, it can be added directly. For tank sizes greater than 10,000 gallons, online dosing is recommended.

Q: Is **PRI-G** like these engine oil treatments that coat parts?

A: No. **PRI-G** affects only fuel behavior. **PRI-G** contains no solid materials and does not coat engine parts.

Q: Are any of these oil treatments effective?

A: We do not evaluate or test engine oil treatments.

Q: Aren't all gasolines essentially the same?

A: No, not at all. Even when processed by the same refiner, gasoline quality can vary considerably day-to-day depending on the crude oil feedstock used and the processing controls implemented at the refinery.

Q: I have a very high mileage engine and I'm not getting better performance with **PRI-G**.

A: **PRI-G** is not a "mechanic in a bottle" and can't replace worn rings, cylinder liners, or worn out injectors. However, **PRI-G** is recommended for operators of older equipment in that **PRI-G** will keep fuel tanks and fuel delivery systems clean, minimizing problems.

Q: I have about 100,000 miles on my engine. Is it too late to start using **PRI-G** to prevent wear?

A: No. **PRI-G** can add years to "middle-aged" engines by stopping excessive wear and carbon build-up.

Q: Is **PRI-G** good for two-stroke engines, like marine outboards, lawnmowers, jet skis and motor bikes?

A: **PRI-G** should be mandatory for use in two-stroke gasoline engines. Carbureted engines are especially wasteful of fuel and prone to produce heavy carbon. It is much better to use **PRI-G** in every tank to prevent carbon build-up and more complete combustion than it is to run a harsh solvent cleaner through the engine to "blow-out" carbon. The latter approach presents a risk of loose carbon lodging in an upper ring area, causing engine damage. **PRI-G** is also great for EFI systems and the latest direct injection systems.

Q: I've been using **PRI-G** for many months with good results. However, this summer **PRI-G** doesn't seem to be giving me the fuel economy improvement I usually get. What's the problem?

A: There are two reasons. First, gasoline expands in hotter weather and fuel economy consequently drops. Without **PRI-G**, you can expect a greater fuel economy loss. Secondly, engines work harder in the summer, operating under higher heat while providing horsepower to run air conditioning compressor units. **PRI-G** helps improve fuel combustion and efficiency when your engine needs it most.

Q: I have had a vapor locking problem in hot weather. Will **PRI-G** do anything for this?

A: Yes. Many of our **PRI-G** clients report they no longer have vapor locking problems.

Q: In my area, we have oxygenated fuels that contain MTBE or ETBE. Is **PRI-G** compatible with these oxygenate additives?

A: **PRI-G** is compatible both with oxygenates and the other additives provided by retail gasoline marketers. In fact, refiners report that oxygenated fuels are about three percent less efficient than prior formulas. Some consumers report even greater reductions in fuel efficiency with these fuels. By improving combustion, **PRI-G** helps provide better fuel economy when oxygenated fuels are your only choice.

Q: What's the story on oxygenated fuels? Are they good or bad?

A: There is a considerable amount of information available on oxygenated fuels on the World Wide Web. We suggest you browse the web and research the issues regarding these fuels.