## Marketing Bulletin MB 2052, August 2001

## Using a Diesel Fuel Additive

## **Some Common Questions and Answers**

- 1) Why do I need a diesel conditioner?
  - A. Because diesel fuel quality is poor, and getting worse. Preventative maintenance of your diesel engine FIE system will save money and time in the long run. FIE pumps are expensive. Protect them. In addition, you need to protect against fuel gelling in cold weather, and against hard starting and excessive wear in hot weather.
- 2) What exactly is low sulfur diesel?
  - A. It is fuel which has been hydrotreated at the refinery to reduce sulfur to no more than 0.05% by weight. It is a legal specification required for all on-road diesel applications, and is for environmental reasons. The biggest negative side effect is the reduction in diesel fuel's natural lubricating properties. The sulfur itself is not a lubricant, it is the actual hydrotreating process which has this effect. Beware of any additive which claims to "put back the sulfur and restore lubricity" it does not work like that!!
- 3) Fuel suppliers blend diesel and kerosene for winter should I change the amount of treatment I use?
  - A. If you are using a kero blend, you should still use an additive because kero/#1 has very low lubricity, which Stanadyne additives will restore. Plus of course, Stanadyne Performance Formula provides additional benefits such as detergents, water demulsifiers, anti-oxidant etc. In fact, if you use PF, you don't really need to use a kero blend, (which also has a lower energy content). PF will stop gelling, improve efficiency and lubricity, and save you money.
- 4) It's 10 degrees and my diesel won't start (I forgot to add the **Performance Formula**). Can I double or triple the treatment to get it started?
  - **A.** Yes. You might also try opening the fuel filter, and pouring PF straight into the element. Extra strength treatment with PF is not usually necessary, but it will not harm the engine or FIE system.
- 5) Will **Performance Formula** cost me more in cents per mile?
  - **A.** No, because you will gain savings in two ways better mileage (about 8% is typical); and also because you do not have to buy blended or treated fuel, which usually costs more than regular #2 diesel.
- Will using an additive void my engine warranty?
  A. No.
- 7) When, if ever, do you recommend using more than the specified amount of conditioner?
  - **A.** Not really necessary, except when <u>very</u> cold (-20 F), or using jet fuel/#1, to provide extra lubricity protection.
- 8) Will Stanadyne's **Performance Formula** PREVENT bacteria in diesel fuel?
  - A. It will certainly help (due to the stabilizers in PF).
- 9) Will Performance Formula KILL bacteria in diesel fuel?

- A. No. It is not a poison/pesticide (which is what biocides are). Such poisons are very strictly controlled in use, storage, sales etc. by EPA and other Agencies. We do not want to require our dealers or customers to have to be registered and potentially liable for such products. If you have "bugs" in your fuel, the only thing that a biocide will do is kill the bugs, but you will now have dead bugs clogging your fuel lines and filters instead of live ones. The only real answer is to drain the tank, clean it, and fill with fresh fuel treated with PF.
- 10) Can I run **Performance Formula** in my Ford Powerstroke?
  - A. Yes. Ford recommends both **Performance Formula** and **Performance Formula Junior.** See Stanadyne Marketing Bulletin MB2046, or Ford "M" letter 98-M-10, and Ford Oasis Special Service Message 12370.
- 11) Would I improve lubricity by mixing **Performance Formula** and the **Worldwide Blend Lubricity Formula**? Is it necessary?
  - **A.** Yes, lubricity would improve by using **Lubricity Formula (World Blend)**, and you <u>can</u> mix our additives, but it is not necessary to use PF <u>and</u> Lubricity Formula, unless you are using 100% Jet fuel or Kerosene.
- 12) Can't I just add some ATF to the diesel all the truckers tell me to?
  - A. ATF is formulated for a completely different function. It has chemicals that can actually harm the precise parts in a FIE system. It is not designed to be combusted (burnt), and will leave ash deposits in the engine, which will harm the engine. Use the correct tool for the job.
- 13) What separates **Stanadyne's Performance Formula** from the competition?
  - A. Three things:
    - 1. Stanadyne is the only additive <u>made by a diesel FIE company</u>. All the others are made by chemical companies, who also make lube additives, coolants, air fresheners, car polishes etc. Stanadyne makes diesel fuel additives. We know diesels!
    - 2. Stanadyne is the only brand <u>recommended and used by OEMs</u>: GM, Ford, VW, J. Deere, & others. In addition, Stanadyne is the #1 Brand carried and recommended by diesel fuel specialists ADS members and service dealers.
    - 3. <u>Independent testing</u> by Southwest Research confirms that of the 10 most popular additives, Stanadyne Performance Formula came out on top in all three of the major performance categories.
- 14) If a fuel supplier uses a conditioner in their fuel, will Stanadyne **Performance Formula** still perform as advertised?
  - **A.** Yes. There is no harm in using PF in "premium" fuel, and you will still get the benefits (but there is no legal definition or specification for premium fuel each fuel company has their own standard)
- 15) What is the best way to blend in the conditioner with the fuel in a vehicle?
  - **A.** Put the conditioner in the tank, then fill with fuel to ensure correct mixing.
- 16) What is the best way to blend in the conditioner with the fuel in a storage tank?
  - A. Same as in 13 above.
- 17) I only use an additive in winter, to stop gelling. Why should I use it in summer?
  - **A.** Fuel problems in summer can be very serious heat can lead to low lubricity & excessive wear; water caused by humidity and condensation is a problem; and you still need to raise the cetane to get better mileage and power.
- 18) Stanadyne's fuel conditioners do not have alcohol in them. Why is this so important?
  - **A.** Alcohol is abrasive. It will lead to excessive wear. Also, it dissolves water, thus temporarily "hiding" it until temperatures drop, when the water will form droplets again,

- and cause corrosion, wear, bugs etc. Do not use any additive on a regular basis if it contains alcohol.
- 19) Do I need to treat my fuel with your conditioner EVERY fill up? Alternatively, can I do it every other fill up or longer?
  - **A.** We recommend every fill up, because you don't know what quality of fuel you will buy next. However, many people use it every other fill up, and that is certainly better than not at all.
- 20) Where can I buy Stanadyne additives?
  - **A.** Virtually all authorized Stanadyne Dealers carry the product, or can get it within a few days. See Yellow pages for the nearest Stanadyne Dealer, or call 180 842 2496. Some Dealers will ship to your door via UPS.

For more information, call Stanadyne Power Products Division on (800) 842 2496, or visit our web site at stanadyne.com

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