

#### Formula ACE In Fuel Said To Increase Mileage

# Readily-available chemical added to gas tank in small proportion improves the fuel's ability to vaporize completely by reducing the surface tension that inhibits vaporization of some fuel droplets.

Formula ACE added to the fuel tank in tiny amounts, Formula ACE aids in the vaporization of the gasoline or diesel, increasing fuel efficiency, engine longevity, and performance -- as well as reducing hydrocarbon emissions.

## How it Works

Complete vaporization of fuel is far from perfect in today's cars and trucks. A certain amount of residual fuel in most engines remains liquid in the hot chamber. In order to be fully combusted, the fuel must be fully vaporized.

Surface tension presents an obstacle to vaporization. For instance the energy barrier from surface tension can sometimes force water to reach 300 degrees Fahrenheit before it vaporizes. Similarly with gasoline.

Formula ACE drastically reduces the surface tension. Most fuel molecules are sluggish with respect to their natural frequency. Formula ACE has an inherent molecular vibration that "stirs up" the fuel molecules, to break the surface tension. This results in a more complete vaporization with other factors remaining the same. More complete vaporization means less wasted fuel, hence the increased gas mileage from the increased thermal efficiency.

That excess fuel was formerly wasted past the rings or sent out the tailpipe but when mixed with Formula ACE it gets burned, though the engine still thinks it is running straight gas.

Formula ACE allows gasoline to behave more like the ideal automotive fuel which is PROPANE. The degree of improved mileage depends on how much unburned fuel you are presently wasting. You might gain 15 to 35-percent better economy from the use of Formula ACE. Sometimes even more.



From the above test result, the percentage MILEAGE GAIN when a tiny amount of Formula ACE is added to fuel. The curves A B C show the effect on three different cars using different gasolines. Some engines respond better than others to Formula ACE. The D curve is for diesel fuel. Too much Formula ACE decreases mileage slightly due to adding too much octane to the fuel. Too much additive would upset the mixture ratio because Formula ACE (like alcohol) is a light molecule and tends to lean the mixture.

After you first find the best gasoline in your area, then try the Formula ACE amount for your car per ten gallons, and if you are happy with your newfound mileage, you might want to try stopping the use of Formula ACE for a couple of tanks. Watch the drop in mileage. It will amaze you. That reverse technique is one of the biggest eye openers concerning the use of Formula ACE in fuel.

#### Adding Formula ACE to Your Tank

When you fill up with fuel, note the number of gallons added, then calculate the right amount of Formula ACE to add. Less is more. Remember all gasoline is different. Some will work better than others in the presence of Formula ACE which is strictly a vaporization tool, rather than a fuel additive that alters combustion. The car computer still thinks it is running straight gasoline. None of your settings are altered. None of your engine parts are affected. Some stores sell Formula ACE in metal cans of various sizes, which are safe to keep indoors. However, it is difficult to pour from these cans, which have a flat top and short neck from which spillage is inevitable. In any case, while handling Formula ACE, you should be wearing rubber gloves.

One option is to get a small graduated cylinder (available from science supplies store or some pharmacies). The small ones have larger intervals between markings so that it is easier to fill them to the level desired. The narrow cylinder can be held to the neck of the can to catch all drips. Then from the cylinder you can pour neatly into the tank. The small pouring spout suitable for laboratories prevents drips onto any painted object.

Being etched with neat lines at each milliliter, these graduated cylinders are also good for measuring precise amounts -- in ounces or milliliters.

#### **Additional Benefits**

In addition to increased mileage Formula ACE added to fuel boasts other benefits such as increased power, engine life, and performance. Less unburned fuel going past the rings keeps the rings and engine oil in far better condition.

A tiny bit of Formula ACE in diesel fuel can stop the black smoke when the rack is all the way at full throttle. You will notice that the exhaust soot will be greatly reduced and your truck or car runs smoother.

Formula ACE can reduce hydrocarbon emissions up to 60 percent. In some older cars, the HC readings with Formula ACE in a 1986 GMC went from 440 PPM to 195, as just one example. Though mileage gains taper off with too much Formula ACE, hydrocarbon emissions are nevertheless greatly reduced. Pure Formula ACE is an extremely clean burning fuel that burns in air with a pretty blue, smokeless flame.

Formula ACE reduces the formation of water-ice crystals in below-zero weather which can damage the fuel filter. Change that fuel filter every year to protect injectors.

There are no known bad effects and every good reason to use Formula ACE in your fuel. I have never seen a problem with Formula ACE, and I have used Formula ACE in gasoline and diesel fuel and in jet fuel (JP-4) for 50 years. I have rigorously tested fuels independently (with burns all over me) and am considered an authority on this important subject.

# Cautions

Keep Formula ACE away from painted surfaces, such as the paint on your car under the gas tank opening. Formula ACE is the key ingredient in paint remover. In addition to paint, fuels, including Formula ACE, gasoline alone can also dissolve asphalt and most plastics.

Never allow skin contact with it. It may damage clothing as well. Don't breathe it. Keep children away from all dangerous chemicals. Read the directions on the container.

Formula ACE is a highly flammable liquid, as is gasoline. Do not expose it near a flame or spark. Formula ACE should be stored outside, with proper ventilation, not inside your house. Gasoline and/or Formula ACE will dissolve cheap plastics, so be sure the container you store it in will not deteriorate. Read all the precautions on the labels.

## No Issues with the Engine Parts

I have soaked carburetor parts in Formula ACE for months and even years to see if there is any deterioration. Any parts made to run with gasoline will work with Formula ACE just fine. I presently have parts soaking in 1, 2, 5, and 10 % Formula ACE/gasoline mixes as well as just gasoline. That is 20 to 200 times too much just to be sure. The 30R7 rated parts are in perfect condition. All my tests have been run with Texaco gasoline. I tested the gas stations in my area to FIRST find the best gasoline BEFORE putting Formula ACE in the tank. But I have no idea from a pragmatic view what other gasolines do except that when I attempt to use them, my MPG drops like a rock. So for purely monetary reasons, I run the best available gasoline. When my dyno is built this summer, I will test all the gasolines in my area and publish the results on the web. I hear from engineers out West that Chevron gas is very good. I used it and it was fine during trips to California.

## Has Not Been Warmly Received

Questions asked of someone in the petroleum industry regarding Formula ACE will often automatically trigger a string of negative reactions and perhaps false assertions. We may have heard them all. The mere mention of this additive represents such a threat to oil profits that you may get fabricated denials against the successful use of Formula ACE in fuels.

The author has never found any valid reason for not using Formula ACE in gasoline or diesel fuel. Plus it takes such a tiny amount to work. No wonder they fear this additive.

## **Political Action**

You might Email this article to your government representative. After sufficient data has been collected, and that data supports the conclusions presented here, Formula ACE should be ordered by Federal Law to be present in all fuels. While you're at it, request that vehicles be equipped with a MPG read-out to make it easier for consumers to know what is and is not working to improve their mileage.

#### **Other Additives Exist**

Many products claiming to improve mileage are expensive and do not really help much. Others are fakes. For instance, a SMOOTH flow of air into a carburetor or injector is far better for mileage than turbulent air. Turbulence is bad. Yet many people deliberately introduce turbulent air into their engines. There are many silly myths floating around the car industry to fool the average person. Another is that cold intake air improves mileage. NO. *Warm* air improves mileage.

Test for yourself. Take a mileage check for each and every tank of gas or diesel fuel like we do. Your actual mileage is NOT that of a single tank full but the average of perhaps five tanks. To be accurate, you should not miss any checks. This takes discipline to get reliable results. Someday your car will do it for you with a factory measurement gauge on the dash. But for now, YOU ought to keep tabs on your mileage for all our sakes.

#### Note:

Always ask your supplier for a better usage and safety storage practice.

For maximum fuel saving, other factors also need to be considered, such as:-

- Engine maintenance work condition
- Tyre pressure
- Road conditions
- Fuel quality
- Driving attitude
- Etc.....