

Why Alcohol is Bad News in Middle Distillate Fuels

Some additives for diesel fuel and heating oil (furnace oil) contain alcohols, purportedly for the purpose of removing water from the tank. Alcohols in middle distillate fuels are a bad idea for several reasons.

1. Alcohol does *not* remove significant quantities of free water from fuel tanks. If you have a visible layer of water on the bottom of a fuel tank and you add alcohol, the alcohol will simply join the water and make a deeper layer of alcohol/water mixture. The same is true in gasoline, where so-called “Dri Gas” (isopropyl alcohol) has been used for years by car owners to supposedly prevent water buildup. If alcohols really did that, then our current gasohol should prevent any water buildup in gasoline tanks – and it does not.
2. Water is corrosive to steel (i.e. “rusting”), but an alcohol/water mixture is even more corrosive to steel. The alcohol in the water might even prevent the corrosion inhibitors in other additives from stopping tank corrosion.
3. Alcohols are often good “food” for bacteria and other troublesome microorganisms that produce sludge, cause pitting corrosion of tanks, and degrade fuels.
4. Alcohols can cause swelling and breakdown of gasket and seal materials commonly used in fuel systems.
5. Alcohols, and additives based on alcohols, are flammable liquids and therefore cannot legally be shipped by UPS or other common carriers without suitable hazmat labeling and packaging. Flammable liquids should also not be carried inside the cab of trucks unless they are accompanied by the required hazmat shipping papers, and then only in very small quantities.

Some additive manufacturers simply ignore all of these issues and fail to alert their users about alcohol in their additives. Always look for the words, “Contains No Alcohol” on the product label.

It is highly recommended that you avoid additives containing alcohol. If the label does not specifically say, “Contains No Alcohol,” ask the supplier about this before you buy the product. If you already have additives on hand and are concerned that they might contain alcohol, ask the manufacturer or read the MSDS for clues (alcohols are flammable and therefore *should* be listed on the MSDS among the hazardous ingredients.)

Fuel Right® additives contain no alcohol.