




FUEL TREATMENT

PROVEN **ALL-IN-ONE** CHEMISTRY™



WE MAKE WATER BURN!™

(716) 745-1461

Eliminating water in fuel systems since 1965 

K-100.COM

What is K100 Fuel Treatment?

K100 Fuel Treatments are proprietary formulations of organic compounds to eliminate water in fuels, remove gums and varnishes as well as stabilize fuel. It adds lubricity, corrosion protection and boosts cetane/octane ratings. This all-in-one chemistry is all you need to keep engines running right.

Benefits of Using K100:

- + Prevents phase separation in ethanol blended gasoline
- + Eliminates water-related problems
- + Stabilizes and keeps fuel fresh for up to two years
- + Increases octane/cetane ratings 1-1/2 to 2 points
- + Replaces lost lubricity in LSD, ULSD and K-1 winter blends
- + Cleans engines and fuel systems for better mileage, easier starts, smoother idle, more power and better acceleration
- + Reduces black smoke, unburned hydrocarbons, CO and particulate emissions
- + Reduces maintenance costs, down time and extends engine life

Use K100 G+ for gasoline fuels and K100 D+ for diesel fuel applications.



G+



D+

Water Can't Fuel Engines.

Condensation in a fuel tank is normal and is the most common form of fuel contamination. It can lead to issues such as piston damage, rust and eventually engine failure.

That's why it's essential to use a fuel treatment that chemically attacks and eliminates water accumulating in your tank. K100 is that solution. It's the one fuel treatment chemically created to prevent problems and equipment damage associated with contamination.

K100 Fuel Treatments improve engine performance for your car, truck, boat, ATV, motorcycle or anything you operate that utilizes a gas or diesel motor.

The Problem: Water.

Water in a fuel tank can lead to a wide variety of problematic issues. Gas mileage decreases, there's poor acceleration or the engine stalls or won't start. Elimination of water in fuel helps eliminate all these problems.



Problem: Ultra-Low Sulfur Diesel (ULSD) Water.

ULSD contains up to a 10-fold increase in water (due to hydro-treating at the refinery). Water can cause a tip to blow off an injector, or reduce fuel lubricity which can seize close tolerance assemblies such as plungers.

Problem: E-10 Water.

E-10 ethanol blended gasoline readily absorbs moisture, and if enough water is available it will phase separate. This only takes 1/2 of 1% of water at room temperature (even less at cooler temperatures).

Phase separation means that ethanol falls out of solution with the gasoline. This leaves a layer of low octane gasoline on top and a layer of wet ethanol on the bottom that won't burn. It causes poor engine power or the engine won't start. Plus, it can ruin carburetors, injectors and lead to severe cylinder scuffing in 2 cycle engines.

Problem: Off Road and Heating Oil Water.

Fuel tanks outside or above ground will have significant daily and seasonal temperature changes. This accelerates the formation of condensation inside the tank that results in water accumulation and tank corrosion.

Problem: Bio-Diesel Water.

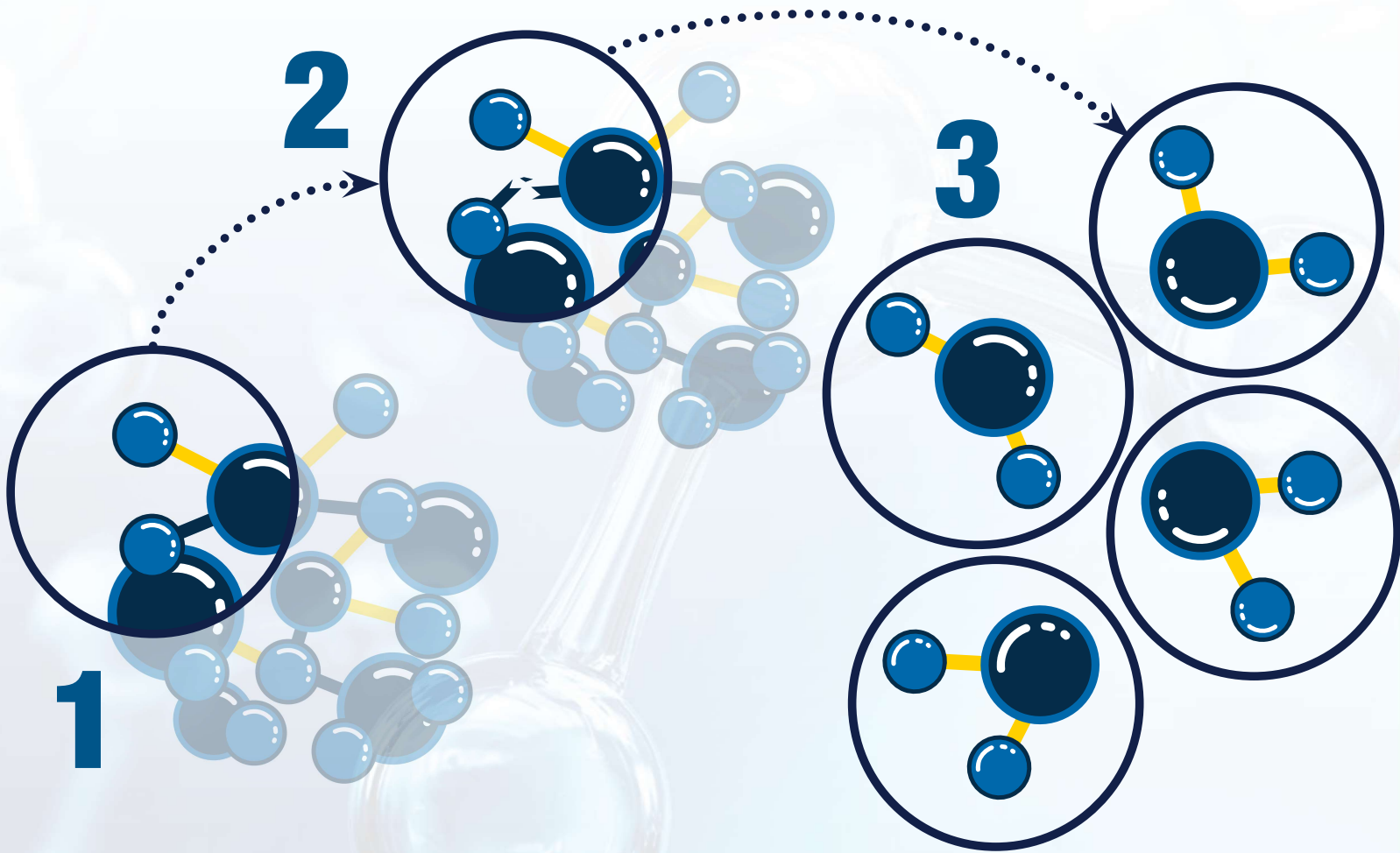
Bio-diesel fuels contain high amounts of dissolved water residual to the processing. Water forms ice crystals as it approaches 32° and provides sites of nucleation that accelerate the gelling of the residual fuel.



32°

Temperature when water forms ice crystals in bio-diesel fuels and accelerates residual fuel gelling.

The Chemistry That Makes Water Burn.



K100 Solves All Water Problems.

K100 has a strong hydrophilic attraction to water. It seeks out water droplets (1) in the fuel system and breaks the bond (2) between adjacent molecules. K100 then permanently bonds itself to each individual molecule and encapsulates it with a combustible shell. The encapsulated water (3) is dispersed throughout the entire fuel tank as an inner-phase suspension. Over time the water is removed as the engine runs, harmlessly burning it off.

The K100 unique bio-based (green) chemistry eliminates all free water. This in turn eliminates water-related problems in diesel and bio-diesel fuels as well as phase separation in E-10.

K100 encapsulates water, ounce for ounce, gallon for gallon, and burns it. Used regularly, K100 upgrades fuel quality and promotes more complete combustion. The benefits include reduced emissions, better mileage, easier starts, smoother idle, more power and faster acceleration.

What else does K100 do? A lot.



Petroleum-based fuels are mixed with additives during refining to meet government mandates for lower pollution levels. Unfortunately, the same agents used to make fuel burn cleaner cause it to be less stable. Deterioration is noticeable in diesel after 90 days and in gasoline after 30 days. As fuel ages there's water contamination. Plus, asphaltenes form, darken fuel and create a sludge that settles at the bottom of the tank.

K100 treatments contain complex organic stabilizers that hold petroleum compounds together and burnable organic compounds that encapsulate free water. K100 G+ and K100 D+ contain enhanced stabilizers for equipment that may sit idle for long periods.



Enhanced Stabilizers for Gasoline and Diesel Engines

The unique organic chemistry of K100 can fix equipment that has not been operated in a while, doesn't start or runs roughly. Simply double the treatment, turn the engine over enough times to get the treated fuel throughout the system then wait a 1/2 hour for the treatment to take effect.



1/2 Hour

is all it takes for K100 to get non starting equipment back in operation

The many other benefits of K100.



Increased Lubricity



Diesel and 2-cycle engines need fuel lubricity. It prevents premature wear in fuel pumps and injectors (97%) and in off-road and marine fuels (90%) to reduce pollution. Cold-weather operations reduce lubricity even more. Adding a lubricating agent is essential year-round maintenance. Refiners add some lubricating agents to meet ASTM standards, but those

standards don't meet recommended engine lubricity ratings by manufacturers.

K100 Fuel Treatments contain an organic lubricant that coats the fuel system components to prevent corrosion and oxidation. It also burns cleanly and completely, so there are no ash deposits to foul rings, valves or plugs.

- + Lubricates the fuel system to reduce friction in the fuel pump, injectors and combustion chamber
- + Increases lubricity in LSD, ULSD, red-dye and K-1 winter blends by 20-40%
- + Reduces cold-start scuffing on 2-cycle engines
- + Burns cleanly and completely leaving no ash deposits

Fact: Cleaner Engines Operate More Efficiently.

All engines suffer from a build-up of sludge, varnish and carbons. These sediments clog fuel lines, leave deposits in the carburetors and cylinders and may even cause sticking rings.

K100 contains complex organic solvents to dissolve sludge, gums and varnish and prevent reformation of those deposits. Cleaner carburetor jets and fuel injectors will result in up to 25% better fuel mileage. K100 Fuel Treatments even dissolve asphaltenes and put them back into the fuel to maintain full power.

K100 Dissolves Gums and Varnishes

- + Cleans engines for easier starting, smoother idle, more power and better acceleration
- + Cleans carburetors and fuel injectors for better mileage
- + Dissolves deposits on injector tips to restore the spray pattern
- + Stops fuel line blockage
- + Stops fuel-related hesitation

Home Heating Fuel.

K100 cleans burner tips for a better spray pattern and more complete burn, plus it cleans heat exchanger plates for better heat transfer.

Power up engines with K100.



Proven Chemistry That Works

K100 Fuel Treatments modify the petroleum molecule so it alters the burn chemistry. The result? Better combustion for more power, greater mileage and a cleaner environment.



K100 products are available in 8 oz. and 32 oz. bottles, 5 gallon pails and 55 gallon drums.



Fuel Modified with K100:

- + Atomizes more completely and evenly
- + Reduces carbon monoxide (CO) emissions
- + Reduces unburned hydrocarbon (HC) emissions
- + Reduces particulate emissions
- + Reduces black smoke
- + Reduces oil fumes from 2-strokes, premix or auto-inject

GASOLINE		
Product	Size	Treats
K1008G	8 oz. Bottle	16 gallons
K10032G	32 oz. Bottle	64 gallons
K1005G	5 gal. Pail	1,280 gallons
K10055G	55 gal. Drum	14,080 gallons
SMALL ENGINE		
K1008S	8 oz. Bottle	12 gallons
DIESEL		
K1008WD	8 oz. Bottle	60 gallons
K10032WD	32 oz. Bottle	250 gallons
K1005WD	5 gal. Pail	5,000 gallons
K10055WD	55 gal. Drum	55,000 gallons
MARINE DIESEL		
K10032MD	32 oz. Bottle	250 gallons
MARINE		
K1008MG	8 oz. Bottle	20 gallons
K10032MG	32 oz. Bottle	80 gallons
K1005MG	5 gal. Pail	1,600 gallons
K10055MG	55 gal. Drum	17,600 gallons

K100 benefits are priceless.



Increase Savings. Decrease Costs. Improve performance.

The larger the fleet the more vulnerable it is to fuel related issues and maintenance costs. K100 fuel treatments increase mileage and power, eliminate winter freeze-ups, and reduce clogged filters and sludge formation. This reduces maintenance costs and downtime. K100 also cuts maintenance costs by restoring fuel injector efficiency and extending fuel injector pump life – all without harming catalytic converters. Plus, K100 increases cetane ratings, lubricity and even reduces warm-up time as well as smoke and exhaust emissions.

K100 Fuel Treatments are formulated with all-organic chemical compounds for a bio-based fuel treatment. Trucking, bus and school transportation services report improved diesel engine performance and increased mileage. It also decreases fleet maintenance costs, smoke at idle, carbon deposits and tailpipe emissions.



	D+	G+
Eliminates water and water-related problems	✓	✓
Prevents and reverses phase separation in ethanol blended fuels		✓
Improves engine efficiency for more miles/gallon/hour	✓	✓
Eliminates freeze-ups that block fuel lines and filters	✓	✓
Reduces paraffin formation in winter		✓
Eliminates corrosion and formation of acids	✓	
Adds lubricity to reduce friction in the fuel system	✓	✓
Reduces cold-start scuffing on 2-cycle engines		✓
Burns cleanly and completely leaving no ash deposits	✓	✓
Dissolves gums and varnishes	✓	✓
Cleans engines for easier starting, smoother idle, more power, better acceleration	✓	✓
Cleans carburetors and fuel injectors for better mileage	✓	✓
Dissolves asphaltines and puts them back into the fuel	✓	✓
Modifies burn chemistry for more complete combustion	✓	✓
Reduces emissions	✓	✓
Reduces black smoke and particulate emissions	✓	
Reduces oil fumes from 2-strokes, premix or auto-inject		✓
Revitalizes fuel	✓	✓
Stabilizes fuel for long-term storage	✓	✓
Extends fuel injector pump life	✓	✓
Extends fuel tank life	✓	
Increases cetane ratings 1-1/2 to 2 points	✓	
Increases octane ratings 1-1/2 to 2 points		✓
Upgrades lower quality fuel	✓	✓
Reduces need for K-1 additive in winter blends	✓	
Excellent for ULSD, Bio-diesel, Home heating fuels	✓	
Excellent for E-10 fuel, 2 and 4 cycle engines		✓