



Decalin Chemicals LLC

P.O. Box 830 Fall River Mills, CA 96028 Tel:

(650) 353-5062 Fax (650)353-5066

Technical Data Sheet: Decalin CH-77 Gasoline Fuel Additive

Composition:

Butoxylated linear polyol

Emulsifiers and surfactants Polyether amine.

Antioxidant inhibitor.

Application

Decalin CH-77 Gas Additive is designed and formulated to:

1. Mitigate the negative effects of ethanol in gasoline while removing liquid water in the tank or carburetor,
  2. Remove carbon from the combustion chamber and piston rings,
  3. Remove gum from carburetor internals,
  4. Clean fuel injectors
  5. Prevent internal corrosion in the fuel system during storage because water is removed.
- The product will not attack or degrade the materials normally used in fuel tank, fuel injector, carburetor or fuel line construction.
  - It does not contain highly volatile solvents so it is safe to ship by UPS or FedEx. It cannot be shipped by USPS.
  - It has an easy to use graduated measuring and dispensing reservoir built into the bottle.
  - Tested and stable down to 0 degrees F.

Notes on the effect of Ethanol on moisture in a tank

Water can enter a fuel system in two ways:

It can be accidentally added by virtue of a cracked fuel cap during washing or during rain.

It can condense on the walls of a tank from humid air during nighttime cooling. Repeated consumption and filling of a tank replenishes the space above the fuel with more humid air. Condensed moisture runs down the tank walls to the bottom of the tank.

Once at the bottom of the tank, the ethanol in the fuel immediately moves from the gasoline into the water until the water is saturated with ethanol. This will increase the volume of water by more than four times. Removing this water/ethanol mixture is what CH-77 is formulated to do, causing this mixture to dissolve into the fuel and burn as normal fuel. It is not suspended as droplets, it is a completely dissolved in the gasoline.

In aviation use, it is recommended that the tank is kept as full as is practically possible to minimize air contact. Normal sumping should be done to remove any traces of water prior to flight.

For all other engines, emptying the fuel tank and running the engine until the carburetor is empty is recommended for long term storage.

Physical Properties

0.90	g/ml
Pale blue to green.	
340 deg F	171 deg C
160 deg F	71 deg C
Mild amine	

Remove the cap on the reservoir. Squeeze the bottle to push product into the reservoir. The reservoir is marked  $\frac{1}{2}$  and 1 ounce. Pour the required amount into the fuel tank. The product will disperse rapidly in the fuel.

Auto, snowmobile, snowblower, lawnmower, chainsaw and other small engines: 1 ounce per 5 gallons gasoline or gasoline/oil mix.

One ounce of CH-77 will remove  $\frac{1}{6}$ <sup>th</sup> ounce of water, or 30 ml CH-77 removes 5 ml of water.

### Application:

For known water content in a fuel tank, add 2 ounces per 5 gallon of fuel. Run the engine until the tank is almost empty. Refill with gasoline and add CH-77 at the rate of 1 ounce per 5 gallons of fuel.

If an engine is known to be choked up with deposits in the oil sump and under the valve cover, add four ounces CH-77 directly into the oil. Change the oil 1,000 miles later or after 2 hours of operation in a small engine. Refill with oil normally after this procedure. Do not feed the neat product directly into the throttle body or carburetor choke inlet. Displaced carbon chunks could cause damage inside the combustion chamber.

### Storage

Store at 90 deg F or below. Darkening may occur above this temperature, but this does not affect the performance of the product. Do not store in direct sunlight or in wet or excessively humid environments.