Essentialube®

Lubricating, Flushing & Blending Agent
Essentialube®

Introduced in 1946, Essentialube® has been continually improved with the latest technology to become recognized worldwide as a unique, multi-functional performance product. As the name implies, it is an essential lubricant and fuel improver for many types of equipment and a multitude of applications. Essentialube is safe for use in fuel systems, as a blending and/or flushing agent in engine oils, hydraulic fluids, transmission fluids, gear oils, compressors and more.

Hydrotex® is proud to supply you with this high performance, multi-functional product. It combats the formation of harmful deposits caused by acids and oxidation in your fuel and lubrication systems. By removing deposits and neutralizing acids continuously, Essentialube dramatically improves performance, extends equipment life and reduces maintenance costs. In addition, Essentialube is now packaged in a convenient spray bottle; use it to free rusted parts; loosen dirt; dissolve grease, grime, tar and adhesive; and lubricate moving parts.
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Why a Blending Agent?

Today's modern fuels (reformulated gasoline, ultra low, low and high sulfur diesel; LPG and natural gas), contain sulfur and oxygenates that affect fuel stability, lubricity and combustion. During combustion, sulfur combines with oxygen and water to produce sulfuric acid. This acid attacks liners, piston rings, bearings and other engine parts.

Essentialube works to neutralize the acid to help minimize wear.

Essentialube®
The Advanced Formula
Multi-Functional Blending Agent

Essentialube can be used safely in all types of engines - gasoline, diesel, LPG and natural gas. When used continuously in the fuel system, Essentialube stabilizes the fuel for more complete combustion. This helps reduce accumulations of harmful deposits throughout the fuel system and reduces combustion deposits in the upper cylinder and piston ring belt areas. Also, by neutralizing acids, Essentialube prevents gums and varnishes from separating out of the fuel, further reducing deposit build-ups.

Essentialube causes a beneficial change in the heavy hydrocarbons of fuels and oils. It dissolves the larger agglomerated structures of sludge and varnish into smaller particles.

Continuous use of Essentialube in all internal combustion engines, whether they are off-road, on-highway or stationary, is cost effective preventive maintenance.

Downtime is Lost Time & Lost Money.
With Essentialube, varnish in fuel is dissolved and dispersed to promote better atomization. Fuel burns more evenly and completely to improve fuel economy. **Essentialube is blended from 100% petroleum base products and is registered in compliance with the EPA 40 CFR 79.24.**

### In Fuel Storage Tanks:

Use Essentialube in fuel storage tanks to solve inherent fuel problems such as wax, gums, varnish, water and microbial contamination.

- **Initial Treatment:** Use one (1) gallon of Essentialube to each 125 to 150 gallons of fuel. Essentialube mixes thoroughly and remains mixed with all liquid levels.

- **Subsequent Treatments:** Use one (1) gallon of Essentialube to each 250 to 300 gallons of fuel.

### In Automotive Vehicle Tanks:

Essentialube, used as a fuel improver, will improve fuel economy, clean the entire fuel system and prolong engine life. In addition, it will increase power and torque, as well as, reduce the deposits in combustion chambers and pistons.

- **Initial Treatment:** Use one (1) ounce of Essentialube to each gallon of fuel. Essentialube may be put into the tank before or after filling with gasoline or diesel fuel.

- **Subsequent Treatments:** Use 1/2 ounce of Essentialube to each gallon of fuel.

After using Essentialube-treated gasoline for 1,000 miles or 25 engine operating hours, improve performance further by re-gapping the spark plugs to standard setting and adjusting the carburetor or fuel injection and engine timing if necessary. Future engine tune-ups may then be performed at extended intervals. Hydrotex recommends having an extra fuel filter element on hand when using Essentialube to clean-up extra dirty fuel tanks.

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### Truck and Bus Fleet Operating Expenses

- **Fuel** 38%
- **Maintenance** 28%
- **Depreciation** 16%
- **Overhead** 12%
- **Lubricants** 1%
- **Tires** 5%
Essential Engine Oils

Essentialube dissolves and disperses agglomerated molecules of sludge and varnish in used oil resulting in reduced viscous friction and heat. The improvement in the wetting ability (or detergency) of the oil helps to keep engine surfaces clean.

Treatment: For lubrication oils in diesel, gasoline, LPG or natural gas fueled engines, use two (2) ounces of Essentialube to each quart of oil in the crankcase.

When used with every oil change, Essentialube prevents the formation of harmful engine deposits. Motor oil becomes cleaner with each successive oil change, up to the third change, following use of Essentialube-fortified oil. It may be possible to extend both oil and filter element change.

(NOTE: By “cleaner oil” we mean freed from carbon and sludge residues. Clean oil is not necessarily clear oil. The actions of detergent and dispersant additives actually darken oil).

Contamination is anything found in your lubricant that is not:
- Pure Base Fluid
- Specified Additives
- Specified Thickener

Do not overfill the engine crankcase. To avoid having the oil level over the full mark, reduce the amount of oil used by the same amount of Essentialube added.
Cleaning Engines and Freeing Sluggish Valves (Gasoline, LPG or Natural Gas)

1. Operate engine until hot or 180º Fahrenheit. Remove spark plugs. Pour one (1) ounce of Essentialube into each cylinder. Screw in spark plugs finger tight only. Do not use wrench. Start engine immediately and run for three (3) to five (5) minutes at idle. Cut engine.

2. Take off air cleaner. Start engine to fast idle. Slowly pour one (1) to two (2) ounces of Essentialube into the carburetor or throttle body intake. As the last is poured in, shut off the engine quickly.

3. Let engine sit approximately ten (10) minutes. Tighten spark plugs. Re-start engine. Let idle for five (5) to ten (10) minutes. Vary RPMs up and down until smoke stops coming from exhaust.

4. Drain and flush crankcase at once. Do not leave old oil in, as it may contain loose carbon debris that can clog oil lines. Take out spark plugs, clean and re-gap, replace and tighten. Replace oil filter and refill crankcase with fresh engine oil.

Treatment: One or two days before changing oil and filter, drain 10 percent of the old oil from the crankcase. Add Essentialube, bringing the oil charge to the correct level (10 percent Essentialube to 90 percent old oil). Operate engine at normal duty cycle for one or two days. Drain the mixture of old oil and Essentialube. Install new oil filter. Refill the crankcase with Hydrotex Engine Oil. For extra engine protection and continuous oil performance, use Hydrotex LubraKleen® Oil Supplement in the crankcase.
Treatment: Use this application in the special case to reduce oil consumption caused by sticking rings.

1 Determine the amount of oil consumed by:

   A. Checking after running engine a specific number of hours on heavy loads
   B. Running the engine on a dynamometer for one hour
   OR C. Performing a compression test on gasoline engine cylinders

2 Warm the engine to operating temperature. Cover the radiator or run the engine long enough to ensure that the oil in the crankcase has reached operating temperature. Drain and refill the crankcase with half Hydrotex HyFilm® Supreme or LEO engine oil and half Essentialube. Treat fuel with two (2) ounces of Essentialube per gallon of fuel. Run engine for 30 minutes at 1,100 RPMs – no load. Drain crankcase, change oil filter, and replace oil with fresh Hydrotex HyFilm Supreme or LEO engine oil. For extra protection, add Hydrotex LubraKleen oil supplement at the rate of 15 ounces LubraKleen to five (5) quarts of oil. Do not overfill.

3 Re-check oil consumed by:

   A. Running engine under similar loads and conditions for the same number of hours as before
   B. Running the engine on a dynamometer under the same conditions
   OR C. Performing a compression test

If oil consumption is still evident after first flush, repeat procedure. If oil consumption continues after performing the second flush, there is an indication that a mechanical problem exists.
Essentialubeflushing
Hydraulic Systems

Hydraulic systems with high levels of deposits and varnish formations lose precision and operate erratically. When this occurs, we recommend flushing with Essentialube.

Hydraulic System Failure Modes

Treatment:
1. Drain 10 percent of the hydraulic fluid from the system.
2. Replace all filters and clean screens.
3. Add Essentialube, bringing oil reservoir to the correct level (10 percent Essentialube to 90 percent hydraulic fluid).
4. Run the system through its regular duty cycle for two (2) or more hours.
5. Drain all hydraulic fluid from the system.
6. Change all filters and clean all screens.
7. Refill the reservoir with the new Hydrotex hydraulic fluid.

Cleanliness is Next to Godliness

If You Have Not Already Cleaned the Inside of the Machine . . . Consider it Contaminated

Properties to Keep in Mind with Essentialube Flush

- Flash Point 93°F
- Contains Powerful Solvents that will Evaporate at Elevated Temperatures in Open Systems
- Take Precautions to Keep Away from Sources of Ignition
- Essentialube has a very Distinct Smell

Smell Like You Have Actually Been Working!
Essentialube will minimize or eliminate hard shifts and shift hesitation in most instances by freeing the sticking servo-valves in automatic transmissions.

**Treatment:** Add 12 ounces of Essentialube to the transmission fluid for preventive maintenance. *Do not overfill transmission.*

If the transmission is working poorly, remove 12 ounces of transmission fluid and add 12 ounces of Essentialube. This might be sufficient to correct the problem. After adding Essentialube, let the engine idle with the transmission in drive position for five (5) minutes. If the operation is not improved after 100 to 150 miles of driving, during which time speeds are varied to allow the transmission to shift, add another 12 oz. bottle of Essentialube and repeat the procedure.

*If this fails to improve the operation, there may be a mechanical problem that Essentialube cannot correct.*

Essentialube will neutralize harmful acidic residue and dissolve varnish and sludge deposits left over from used oil. Flushing with Essentialube will help ensure proper oil system maintenance and prevent component wear and system corrosion. Essentialube contains a blend of powerful carbon and varnish removers as well as dispersants and acid neutralizers.

**Treatment:** Add two (2) ounces per quart of gear oil. *Do not overfill Gear Box.*

By flushing the residual used oil out of air compressors, Essentialube will help achieve maximum equipment performance and life and extend oil drain intervals. This flush will neutralize the pH and the varnish and sludge deposits will be cleaned and flushed from the system. Essentialube will protect your system from abrasive wear, harmful deposits, rust and corrosion.

**Treatment:** Add two (2) ounces per quart of air compressor fluid. Operate compressor for two (2) hours.

*Note: DO NOT USE* Essentialube in oxygen or air compressors used for medical, food grade or diving applications.
Why Essentialube in a Spray?

Because . . . It’s 16 Ounces of Pure Power!

And it is ideal for all industrial, auto and outdoor projects. There are thousands of uses for automobiles, trucks, motorcycles, boats, firearms, sporting equipment, garages, workshops, farms, homes and industries. Use Essentialube for all general repair and maintenance projects to keep equipment and machinery operating at optimal levels.

Essentialube cleans & protects as it lubricates.

Treatment: Spray desired surface to be lubricated and cleaned, let soak for several minutes. For Superior Lubrication and Rust Protection DO NOT wipe off.

SHOWDOWN

16oz Essentialube® Spray VS. 12oz Aerosol

Essentialube packaged as a spray instead of an aerosol means that you receive actually 16 oz. of the powerful product you purchased. Whereas, with aerosols you receive a large amount of propellant, not the product you purchased.

Even in an efficient aerosol there are approximately only 9oz of actual product in a 12oz can.
Extend the life and increase the performance of chains and sprockets in bikes, motorcycles and other drive chain applications.

**Treatment:** Clean chains and sprockets with Essentialube before applying Hydrotex Chain Oil. You can either spray Essentialube onto the areas to be cleaned or soak the parts in Essentialube.

To extend chain and sprocket life, we recommend a 50/50 mixture of approximately three (3) gallons each of Essentialube and No. 104 and/or other Hydrotex Chain Lubricant be prepared in a suitable container. Chains and sprockets should be removed from the equipment and allowed to soak in this mixture for 12 to 48 hours. Afterward, the chains and sprockets should be removed from the mixture, wiped clean and returned to the equipment. Then they should be lubricated thoroughly with a Hydrotex chain oil.

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**Essential Engine Disassembly & Reassembly**

Use Essentialube in all of your engine repair projects.

**Disassembly:** Soak all engine parts in a 100% solution of Essentialube. The cleaning action of Essentialube will remove gum, varnish, sludge and grime from parts surfaces.

**Reassembly:** To ensure proper lubrication when assembling rebuilt or reworked engines, we suggest that a 50/50 mixture of approximately two (2) gallons each of Essentialube and engine oil be placed in a suitable container with the parts. Allow all parts to remain in this mixture so they will be thoroughly impregnated and well lubricated with Essentialube prior to assembling.
Essentialube can be used as a multi-functional burner cleaner for use in residential fuel, furnace oils, distillates, etc. It facilitates the combustion of tank sludge (having a high BTU content), which would otherwise not be completely burned. This improves overall fuel economy.

Essentialube helps prevent the build-up of carbon and gummy residues on burner tips, firewalls, boiler tubes and heat exchangers. This reduces the expense and downtime of fireside cleaning, and the cleaning of tanks, burners, fuel filters, etc.

Because residual fuels have high sulfur content, they tend to produce a large volume of damaging residues. This makes Essentialube especially important for saving energy and promoting an efficient operation. Essentialube is particularly recommended for use in Bunker C Fuel, kerosene, distillates, furnace oils, Residual Fuel No. 3, No 4, No 5 and No 6.

**Treatment:** For regularly scheduled preventive maintenance, use one (1) quart of Essentialube to each 50 gallons of fuel or one (1) gallon of Essentialube to each 200 gallons of fuel. For purging burners, walls and heat exchanger tubes with exceptional amounts of carbon and tanks with large accumulations of sludge use two (2) quarts of Essentialube to each 50 gallons of fuel.

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Essentialube is excellent for use in boat motors, snowmobiles, motorcycles, lawn mowers, chain saws and more.

**Treatment:** For all 4-cycle engines, use one (1) ounce of Essentialube to each gallon of fuel. For 2-cycle engines, use two (2) ounces of Essentialube for each gallon of the gas and oil mixture. Be sure to follow the manufacturer’s recommendations regarding the proper gasoline mixture, and then add Essentialube.

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Essentialube is an excellent anti-rust compound and may be applied by brush or spray to all metal exposed to the elements. Be certain to coat discs, fertilizer spreaders, garden and hand tools and other pieces of equipment during idle periods.

Essentialube Rust Prevention

Essentialube Seasonal Equipment Storage

Be certain that your stored seasonal equipment will be in working order when you are ready to use it again next year! Essentialube protects against rust, corrosion and fuel degradation when your equipment is stored and not in use.

Use Essentialube to store and protect seasonal equipment such as grain combines, corn pickers, cane cutters, cotton pickers, motorized haying equipment, lawn mowers, leaf blowers, and all other portable outdoor and farming equipment.

>Treatment: Add two (2) ounces of Essentialube for each gallon of fuel capacity in the tank and then fill the tank with fuel.

Next, flush the crankcase, drain out old oil and replace the filter. Fill crankcase with a mixture of half Essentialube and half engine oil (recommended SAE weight). Run engine for eight (8) to ten (10) minutes at a fast idle. Do not race engine. Cut engine and drain crankcase immediately.

Change oil filter and refill crankcase with fresh oil. We recommend Hydrotex high-performance engine oils.

>Treatment: Add two (2) ounces of Essentialube to each quart of engine oil. DO NOT overfill.

Re-start engine and run it for 10 to 15 minutes – or until it reaches normal operating temperatures.

Turn off engine and place equipment in storage.
Essentialube is the best solution for cleaning and removing rust, grime, tar and adhesive. This unique formula provides astounding results.

Pour or spray Essentialube over the parts you want to clean; allow Essentialube to sit for several minutes. In most cases, the rust, grime, tar and/or adhesive will practically wipe off.

Essentialube is an excellent cleaner and lubricant for outdoor enthusiasts. It can be used for all firearms, fishing equipment and other outdoor sporting equipment. A few drops of Essentialube on reels help provide lasting lubrication protection.

Recommended as a superb bore cleaner and lubricant.

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Pour or spray Essentialube over the parts you want to clean; allow Essentialube to sit for several minutes. In most cases, the rust, grime, tar and/or adhesive will practically wipe off.

When brake dust is allowed to sit on chrome wheels for long periods of time, it forms pits in the chrome finish that can be disastrous.

Dirt, dust and the elements can get into these pits and not only ruin your shine but also allow corrosion to start.

Use Essentialube on your car, boat and/or motorcycle chrome to remove everything from light brake dust to road tar keeping your chrome clean and protected.
Hydrotex is committed to business methods and product technologies that reduce emissions and toxic waste as well as conserve valuable natural resources. We take improving the environment very seriously. We believe that ecological stewardship improves profitability for those who take a leadership role. It’s just good business to eliminate waste, limit pollution, save energy, protect capital assets and it’s the right thing to do.

Our Hydrosynthetic® industrial and automotive lubricants allow for exceptionally long drain intervals, thus conserving petroleum resources and reducing waste oil disposal into the environment. We are committed to providing our customers, our neighbors and our children with a legacy of clean air, clean water and a safe environment.

Hydrotex® is a manufacturer and distributor of high performance lubricant and fuel improver solutions. As an employee owned company, we help our customers develop sustainable solutions designed to improve system reliability, save energy, limit pollution, extend fixed asset life, reduce maintenance costs and improve fuel efficiency. Our products and services leverage over 75 years of innovation resulting in superior lubrication solutions and high touch customer service.

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