

VAPO-KLEEN® PREMIUM PROPANE FUEL

CLEANS: *DIRECT & INDIRECT LP-GAS VAPORIZERS
*PROCESS SYSTEMS
*STANDBY SYSTEMS
*PEAK-LOAD SYSTEMS
*GRAIN DRIER SYSTEMS

STOPS: *GAS VALVE FAILURE
*REGULATOR FAILURE
*OIL DEPOSITS
*WAX BUILDUP
*WATER PROBLEMS

VAPO-KLEEN® is a highly effective supplement for propane used in heating or drying applications where the product is vaporized using direct or in-direct fired vaporizers. **VAPO-KLEEN®** consists of several unique chemical compounds dispersed in a petroleum base hydrocarbon solvent. It may be used as part of a maintenance program removing and preventing deposits occurring in vaporizers and downstream in regulators and valves. **VAPO-KLEEN®** will also clean tanks and lines. The polar solvents used in **VAPO-KLEEN®** have been selected to first soften and then gradually remove long chain hydrocarbons carrying them into the combustion chamber or furnace.

VAPO-KLEEN® contains an oil soluble ashless organic substance that holds insoluble foreign matter in suspension without interrupting continuous service. **VAPO-KLEEN®** will also pulverize and disperse water molecules, eliminating the need for methanol except in extreme conditions. **VAPO-KLEEN®** contains no metallic elements or alcohol.

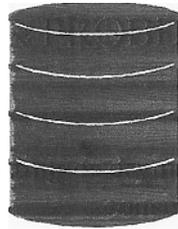
The need for Vapo-Kleen® - LPG as it passes through vaporizers and the fuel system deposits heavy ends. The hydrocarbon chains breakdown at this point in the fuel system, leaving a buildup of a gummy residue similar to grease. Also, water deposits in the vaporizer and fuel system not only will foul the fuel, they can freeze, blocking the flow of fuel. These inherent problems can inhibit performance and require disassembly and clean-up of the components of a fuel system- a time consuming process that can disable the LPG fuel system. Labor costs to regularly clean these components during peak usage time can add significantly to the cost of maintaining the boiler, heater or dryer in the facility. Vapo-Kleen® can and does greatly reduce these problems found with ordinary LPG or HD5 propane.

How does Vapo-Kleen® improve LPG in all these areas? - Without the use of metallic elements or hazardous solvents that by themselves can add harmful impurities to the environment, Vapo-Kleen® improves all of the problems noted above. LPG often leaves a buildup of long chain hydrocarbons in vaporizers, fuel lines and regulators. As these buildups increase, the fuel does not vaporize effectively nor does it flow easily through the system. The emulsifiers in Vapo-Kleen® slowly soften and remove these long chain buildups to prevent their interference with the gas delivery system. The oil soluble substance holds the insoluble foreign matter in suspension so heavy ends are carried through the vaporizers and the gas system and are burned during the combustion process.

Finally, in standby fuel systems, LPG is standing still for several months during the summer in very large storage tanks. In the winter the LP gas delivery system is required to start up immediately, often within one hour upon notice by the natural gas supplier. The long chain hydrocarbons and water can form a larger, more concentrated mass during prolonged storage. The emulsifiers in Vapo-Kleen® breakdown the long chain hydrocarbon (heavy ends) and water droplets during prolonged storage and hold them in suspension, thereby "stabilizing" the fuel during the summer months so it will more readily vaporize "on demand" in the winter heating season. The Vapo-Kleen® fuel is stabilized and kept ready for many months reducing troublesome "standby fuel start-up procedures" and other seasonal related problems. Another noted benefit is that the free water in LPG will be reduced to such minuscule particles that "freeze-up" of vaporizers and fuel lines will be largely eliminated, thus reducing the troublesome seasonal related problems of using LPG.

TYPICAL PROPERTIES

Specific Gravity @ 60 F *****	0.797
Flash Point *****	109 F
Viscosity (SUS @ 100 F) *****	30.0 Sec
Color *****	Blue
Initial Boiling Point *****	318 F
Final Boiling Point *****	400 F
Ash Content @ 500 C *****	Less than 0.005%



DOSAGE

VAPO-KLEEN® can be added to bulk propane storage during deliver of fuel. The optimum dosage is (1) gallon of Vapo-Kleen to 3000 gallons of Propane. Injectors and charging systems are available.



HANDLING

Non-toxic and safe to handle. Store the product in a cool dry place away from heat, sparks or flame. **Do Not Re-Use Containers.**

Harmful or Fatal if Swallowed Combustible Contains petroleum distillates. If swallowed do not induce vomiting. Call physician immediately.

Vapo-Kleen is a registered trademark of Energy Additives, Inc.

[ENERGY ADDITIVES, INC. - PO BOX 1694, BATTLE CREEK, MI 49016](http://www.energyadditives.com)
[Telephone: 1-888-965-N-ER-G](tel:1-888-965-N-ER-G) [Fax: 269-965-3157](tel:269-965-3157)
[Web Site: www.energyadditives.com](http://www.energyadditives.com)