The Truth About Propane

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Introduction

HD5 propane is exported from the United States all over the world because HD5 propane is the only propane that other countries allow for home use. They do not permit importation of refinery “slop.”

The HD5 Difference as Told by Our Customers

Two recent unsolicited testimonials say everything about the HD5 propane difference. The first is from Betty in Bath County, KY, who began using Thrifty Propane’s pure HD5 propane just this winter:

“I don't know if anyone else has noticed this since they have begun using HD5 Propane, but my daily winter headaches, that I've had every year, for over twenty years, disappeared this winter!! (2010-2011) It also is the FIRST winter I've had access to Thrifty Propane!! Coincidence? I don't think so. Nor do I think it's a coincidence that my windows aren't covered with a "film" this winter, again, for the first time. Of course, I, like many, have heard all the "canned" negative responses from Thrifty competitors, but, all I can say is, "Guys, you have DEFINITELY been misinformed!!" Thrifty, PLEASE don't stop delivering in my area!! You have saved me money, kept me warmer, and, for the first time ever, made my winter "pain free"!! I have absolutely no way of expressing how grateful I am, except to say, "Thank you so much for making winter nice for me again!!"

That her headaches vanished this winter and her windows are no longer covered in a murky film is the direct result of the fact that she is using HD5 propane for the first time, and she has a better life while she saves money. HD5 propane delivered Betty a better life, every day.

The value provided by HD5 propane is reflected in Ron Brinker’s letter to Thrifty:

“I went from averaging 1000 gallons a year usage down to 600 gallons with Thrifty. If you consider that my previous supplier's prices were at least 1.5 times higher (after fighting with them to get the prices that low), the savings have been astronomical.”
Ron tells you all you need to know about HD5 propane. We deliver service: we make sure you get the propane you need when you need it. We deliver value: our lowest price guarantee for gas that lasts longer means you will spend less to heat your home year in and year out. Ron saved 400 gallons a year: that translates into real money. When publicly-trade propane majors often charge more than $3.00 per gallon, saving 400 gallons per season translates into a $1200 savings every year. These savings, made greater by our guaranteed lowest price, require no sacrifice, because they are part of the HD5 advantage.

THERE ARE TWO KINDS OF FUEL CALLED "PROPANE"

There is only one chemical that is propane: \( \text{C}_3\text{H}_8 \), found in nature, bound up with natural gas. In 1932, the Gas Processors’ Association published a standard for propane, GPA 2140, that has been the standard ever since. This standard requires that the propane that is drawn out of the “raw make,” the natural gas that comes from the ground, be tested, and that the material tested be at least 90% chemical propane and no more than 5% propylene and no more than 5% other gases, including ethane and butane. Gas processors have strictly adhered to this standard, because the only way they have to transport the gas is over “common carrier” pipelines, that require that every customer of the pipeline have equal access to the pipeline. Because of the length of time it takes to pump propane from Texas to where it used in the Midwest and Eastern Seaboard, customers would have to wait days and even weeks for the gas they bought in Texas, where the propane is stored, to arrive at the terminals where they picked it up. In the middle of winter, such a system would never work. To solve the problem, the gas transporters made the propane “fungible:” all the propane would be identical, so that the gas a customer picked up in Pennsylvania was identical to the gas stored in Texas. To make all the gas identical, the transporters required that all the propane be HD5 propane, and they tested it to make sure that all the propane that went into their pipeline began as HD5 and remained HD5 so long as it was in their pipelines. Homeowners benefited from this business requirement with access to pure HD5 propane.

By contrast, since 1975, oil refineries were able to take advantage of the definition of propane in the ASTM (American Society for Testing and Materials) standard, ASTM Standard D1835, to market oil refining “odds and ends,” known by chemical engineers as “slop,” because they could claim that the slop fit the definition of “commercial grade” propane: any hydrocarbon mixture that held a flame. Such a hydrocarbon mixture need not contain a single molecule of chemical propane, and could contain any poison that came out the top of a refinery.
column. This slop used to be flared off, simply to pollute the air. But when the sulfur was taken out, beginning in 1971, the refineries saw how they could profit from this waste product by selling it to their allies, the publicly-traded major propane marketers, who would drastically mark it up and sell it to house holders as propane. This poisonous slop is marketed throughout the Midwest and East, wherever the marketers can reach, as propane. Slop may be marketed with particular impunity in the so-called "dump ground" states in which there is no regulation of fuel products. In these states, Ohio, Kentucky, Michigan and Indiana, fuel products that cannot be sold elsewhere are marketed to those who do not know they have a choice. In fact, waste product is piped into midwest from US and Canada refinery's for sale as propane to it's residents. Residents of these states must be particularly vigilant regarding their fuel products. For residents of these "dump ground" states the difference between HD5 and "commercial grade" propane is particularly important.

How "commercial grade" propane became slop is the hidden history of propane, which follows.

The Story Behind HD5 Propane

This is the story behind HD5 propane: what it is and why it is different from the propane other marketers offer. In these modern times, there is a standard for every product, from baby formula to window screens. The standards are drawn up by people, people who are part of communities and owe all kinds of loyalties to their friends, their allies and their employers. It is no different at the American Society for Testing and Materials, that has published Standard ASTM D1835, the standard, equivalent to GPA 2140, defining what the propane you buy is. The ASTM Standard has been in use since 1961, and over the fifty years we have relied upon it, it has changed at least a dozen times. We went to MIT and the Cleveland Public Library Science and Technology Collections to find all the published versions of ASTM D1835 since 1961. When we dug out the old standards, we discovered HD5’s hidden history.

Propane: The Hidden History

When we went through the ASTM Standards from 1961 to the present, we found propane’s hidden history. We found, just as we suspected, an elegant flim-flam on the American public: in 1975, when HD5 propane was introduced into ASTM Standard D1835, "commercial grade" propane became the code-word for slop. In 2010, the GAO reported that half of the propane was produced as a by-product of natural gas processing and half was produced as a by-product of oil refining. The GAO reported the facts as they stood, without the history. The history
tells us that where once the dominant source of propane was natural gas processing, by 1975, when “Special Duty” propane, “equivalent to HD5 propane” described in GPA Standard 2140, was introduced, the sources of propane, and with the source of propane, the quality of propane, shifted. In 1961, almost all the propane in America was produced by natural gas processing, which meant that almost all of it was HD5, since the propane so produced had to conform to GPA 2140, the standard of the Gas Processors Association, which had been in effect since 1932.

In 1961, what was to become “commercial grade” propane, used by most homes in four “dump-ground” states and wherever else the US and Canadian refiners could market it, was simply flared off as waste. It smelt terrible and watered people’s eyes because it was loaded with sulfur. By 1970, the detrimental effects of sulfur dioxide ($SO_2$) were obvious, particularly its ill-effects on trees in the Northeast, and the federal government began to impose regulations that required that smoke stacks be scrubbed of the $SO_2$, so-called “desulphurization.” The unintended consequence of this regulation was that by 1975 oil refiners began to see profits two ways in capturing the "odds and ends" and selling it as propane. First, since these odds and ends were hydrocarbons that could hold a flame, they could be sold as “commercial grade” propane, because all the ASTM standard required for “commercial grade” propane was that it be hydrocarbon gas and hold a flame. Second, the oil refiners saved millions a year because they did not have to dispose of the odds and ends, since they were beginning to sell it as propane to home owners. The oil refiners also began to make further millions by supplying the sulfur they captured as fertilizer. Sulfur haulers such as the Kochs also emerged as big winners in the fertilizer sweepstakes. As waste product suddenly emerged as a champion money-maker, production of counterfeit “commercial grade” propane climbed until, as the GAO said last year, half the propane was produced in natural gas processing, HD5, and half was counterfeit propane, consisted of "odds and ends" waste products of high-heat oil refining.

**Sulfur’s Role in Hidden History**

Sulfur profiteering and the mass-marketing of slop as a home-heat hydrocarbon emerged together. In 1971, the first U.S. E.P.A. rules for sulfur emissions was brought out. In response to the rules, refineries brought Flue Gas Desulfurization units on-line to capture the sulfur. Their compliance with the new rules had over time two unintended consequences: 1.) agricultural land, that had obtained “free sulfur” from smokestack emissions, now experienced sulfur depletion as a result of the constant working of the soil, and 2.) the flue gases that remained were possible to transport, since the corrosive sulfur was
taken out. The refining industry, never one to miss opportunity, seized the opportunities that arose from both these circumstances – it began to aggressively to market sulfur as a fertilizer, and to offer the recaptured flue gases as hydrocarbon fuel. The second opportunity is of most importance to you as a home owner who uses propane for heating and cooking.

Since 1971, increasing volumes of recaptured flue gases, so-called “slop” has been marketed as propane, taking advantage of the ASTM definition of “commercial grade” propane that has stood since 1961. By 1975, when “special duty” equivalent to HD5 was introduced into the standard, it was apparent that “commercial grade” propane was on its way to becoming not a natural gas-processing product, but a bonus profit source for the refineries that did not have to show a speck of propane in what they sold, so long as it held a flame. By 2010, half of the fuel marketed as propane was desulfurized oil refinery “odds and ends” captured at the top of the refining column and sold as fuel. But it has, which leaves you with one best and only choice: HD5 Propane.

**Conclusion**

Slop is sold to benefit the refineries who are able to profit by price-gouging propane consumers. Real money is also made by the transporters who are able to sell the sulfur to America’s farmers throughout the Midwest to shock their exhausted fields back to life for another season. The profiteering on slop and the profiteering on agricultural sulfur came together when the oil refineries seized the chance to make money on their refinery byproduct and the transporters seized the chance to profiteer on sulfur, which keeps America’s farm land productive year in and year out despite the constant abuse of industrialized methods that kill the soil.

our hd5 propane burns hotter- burns cleaner-burns longer