

Propane Factsheet

What is propane?

Propane is a by-product of natural gas processing and crude oil refining and is often referred to as liquefied petroleum gas or LPG. Propane is non-toxic, colorless and virtually odorless. Propane becomes a liquid under moderate pressure (150-200 PSI) and is stored and dispensed in its liquid state. Propane is the third most commonly used fuel in the world behind gasoline and diesel and is the dominant alternative motor fuel in more than 38 countries. Approximately 85% of the propane used in the U.S. is produced domestically.

What types of vehicles can use propane?

Propane can be used in light and heavy-duty vehicles. According to the U.S. Department of Energy, there are currently over 200,000 vehicles running on propane in the US and about 9 million in use around the world. Most propane vehicles are currently dual-fuel, large trucks and vans, though after-manufacture conversions for many vehicles are possible and original equipment manufacturers are beginning to offer more factory-ready models. Applications include cars, pickup trucks, forklifts, transit and school buses, delivery trucks, trolleys and vans.

How does propane perform?

Vehicles running on propane have the longest range of any alternative fuel and only a slightly shorter range than gasoline and diesel vehicles. Acceleration, cruise speed, payload, power and maintenance are comparable to those of traditional-fuel vehicles. Propane is very stable at a large range of temperatures, making it appropriate for use in varying climates, and eliminating cold-start problems. Propane does require special safety measures, including regular tank inspections.

What are the benefits of using propane?

Propane has one-third less reactive organic gases than gasoline. Because propane can be stored as a liquid, a high amount of energy can be stored in a relatively small space. Propane has been used for over 60 years with an excellent safety record. It is a non-toxic fuel that vaporizes when released from pressurized conditions so it poses no risk to water or soil resources. It typically costs 5-30 percent less than gasoline. Public fueling stations are more common than any other alternative fuel. Filling time for vehicles is comparable with times for gasoline or diesel fuels. Propane vapors are 50% less reactive than gasoline vapors so they have lower smog-forming tendencies.

LPG reduces:

- Carbon dioxide by 11-13% compared to gasoline
- Nitrogen oxides by 15 – 80% compared to gasoline and 90 –99% compared to diesel
- Hydrocarbons by 20- 40% compared to gasoline
- Carbon monoxide by 30- 35% compared to gasoline
- Particulates by 80-95% compared to diesel
- Ultra fine particles by 99% compared to diesel
- Noise by 50% compared to diesel engines

(source: www.lpga.co.uk/LPGA.htm)



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Where can I get propane?

In the Triangle Region propane is commercially available at many U-hauls (www.uhaul.com) in Durham and Raleigh and at Blossman's (www.blossmangas.com) in Sanford at 2221 S. Horner Blvd. Propane is also available at Haw River on 1043 Jimmie Kerr Road and at other Flying J Travel Centers (www.flyingj.com).

Resources

Alternative Fuels Data Center www.eere.energy.gov/afdc/altfuel/propane.html
National Propane Gas Association www.npga.org