

Propane Motor Fuel Frequently Asked Questions

Is propane a reliable & proven motor fuel?

Yes. Propane has been used as a motor fuel for more than 80 years and is the third most widely used motor fuel only behind gasoline and diesel.

Currently more than 10 million vehicles worldwide use propane as motor fuel. Many U.S. fleets have operated on propane for more than 20 years, such as Yellow Cab in Las Vegas, Schwans Foods home delivery service, the Portland School District, DS Waters, and others. These companies recognize the benefits of operating on propane include great performance, safety, clean emissions, green image, and tremendous cost savings.

Is propane safe?

Yes. Propane has a more narrow flammability range than gasoline. The ignition point for propane is 940 degrees Fahrenheit compared to 430 degrees Fahrenheit for gasoline.

Propane tanks have a relative low working pressure of 240 psi at 100 degrees Fahrenheit compared to CNG (compressed natural gas), which operates at a pressure of 3,600 psi up to 4,500 psi at 70 degrees Fahrenheit.

Propane vehicle fuel tanks are tested to four times the normal operating pressure and the tanks are 20 times more puncture resistant as gasoline or diesel tanks. Propane tanks do not need to be removed and re-inspected as are other alternative fuels such as CNG (compressed natural gas).

Is propane clean?

Yes. Clean, efficient propane has long been recognized as an environmentally friendly energy. It's an approved alternative fuel listed in both the Clean Air Act of 1990 and the National Energy Policy Act of 1992 and 2005.

Compared to gasoline, propane produces fewer greenhouse gas emissions and cuts emissions of toxins and carcinogens, such as benzene and toluene, by up to 96 percent.

Propane fueled vehicles produce significantly lower particulate (almost zero), carbon monoxide, nitrogen oxide, hydrocarbon, and greenhouse gas emissions than gasoline or diesel engines.

Is propane abundant?

Yes. The majority of the propane we use is produced domestically. And with the largest storage capacity in the world, the United States supply is abundant. Pipelines, processing facilities, refueling stations, distribution centers, and storage facilities already exist across the country, making large capital investments in infrastructure unnecessary.

Is engine performance reduced with propane?

No. Fleet operators report horsepower and torque capability comparable to gasoline. The high octane rating and quick vaporization of the liquid fuel delivers excellent performance. Engines operating on propane have quick acceleration characteristics compared to the turbo lag of diesel engines.

Is refueling with propane fast?

Yes. Refueling is simple, clean, and fast. Propane's pump rate – 10 to 12 gallons per minute – is comparable to that of gasoline. This translates into savings in time and energy when compared with other alternative fuels such as CNG (compressed natural gas).

Because propane is delivered through a sealed system, thereby protecting the environment, a simple screwed connection is used. Vehicles can be refueled at nearly 10,000 sites across the country.

Is propane refueling equipment affordable?

Yes. Installing propane dispensing equipment is far less expensive to install compared to other alternative fuels such as CNG (compressed natural gas). Depending on fuel demand the dispensing equipment can be included with a propane supply agreement.

Propane dispensers are available from the simple pump and motor to a state of the art dispenser with card reader and fuel management technologies. Propane tanks are available in both above ground and underground applications in sizes ranging from 500 gallons up to 30,000 gallons.

As an example a state-of-the-art dispenser with a 1,000 gallon tank mounted on a skid can be purchased for approximately \$20,000 without the installation costs, which will vary from city to city.

For a comparable fast fill CNG (compressed natural gas) fueling station an investment of \$250,000 to \$500,000 would be required.

How does propane compare in fuel economy?

Fuel Type	Unit of Measure	BTUs Per Unit	Gallon Equivalent
Gasoline	Gallon	114,100	1.00
Diesel	Gallon	129,800	.88
Propane	Gallon	91,500	1.23

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