

Ethanol Blended Gasoline – Frequently Asked Questions

What is ethanol and how is it produced?

Ethanol is an alcohol produced by fermenting sugar or converted starch, usually from agricultural feedstock such as corn or wheat. It can also be made from 'cellulosic' feedstock such as grain straw, pulp, wood waste, corn stalks and municipal solid waste.

Why is ethanol used in motor fuels in New Brunswick?

In late 2010, the federal government mandated that producers and importers of petroleum products blend renewable fuels that are destined for sale in most areas of Canada. Most producers will need to blend ethanol with gasoline in order to comply, although some may sell conventional unblended gas in certain markets. Some provinces have had their own ethanol-blended gasoline mandates for several years.

How much ethanol is in ethanol-blended gasoline?

The common standard in North America is a blend of 10% ethanol and 90% gasoline, commonly referred to as "E10". New Brunswick producers will use this blend.

E85, which is a blend of 85% ethanol and 15% gasoline, is available in some limited markets in North America. E85 may only be used in "flex-fuel" vehicles produced by some automakers or vehicles that have been modified to accept E85. E85 is not expected to be available in the New Brunswick market in the foreseeable future.

Will ethanol affect the price of gasoline?

The producer's cost of supplying E10 will be determined in part by the market price of ethanol, which in turn is determined by a wide variety of factors. Crop growing conditions, for example, may increase or decrease the supply of agricultural feedstock, thereby lowering or raising ethanol prices. The impact on the price of gasoline is tempered by the fact that E10 only contains 10% ethanol.

What are the benefits of ethanol?

Ethanol is a renewable fuel which helps reduce our dependency on non-renewable fossil fuels. Compared to conventional gasoline, ethanol reduces greenhouse gas emissions that contribute to global warming. Ethanol also acts like a gas-line antifreeze in winter. It also contains oxygen and promotes cleaner combustion when added to gasoline.

When and where will ethanol-blended gasoline be available in New Brunswick?

E10 was introduced into the New Brunswick retail market in mid March 2011 as regular-grade gasoline, although as noted above, some retailers may continue to be supplied with conventional (non-blended) gasoline. Since ethanol (up to 10%) is considered as an additive to gasoline, retail outlets will not be expected to identify whether or not their regular-grade gasoline contains ethanol. Retail pumps may display notices indicating the possible presence of ethanol as an additive.

Will all grades of gasoline contain Ethanol?

No. Only regular-grade gasoline will contain 10% ethanol, although as noted above, some regular-grade pumps may contain conventional, unblended gasoline. Premium grade gasoline will not be blended with ethanol. Mid-grade gasoline, being a 50-50 blend of regular and premium, will contain about 5% ethanol, if the regular-grade at the retail station is ethanol-blended.

Will there be any renewable fuel content in diesel fuel?

The Federal Government has mandated refiners to blend a minimum 2% renewable fuel content based on volumes of diesel and heating oil. For the Maritime Provinces, the compliance period will begin January 1st 2013.

Is it safe to use E10 in my car?

Currently, all major automakers approve the use of up to E10. Some older vehicles (pre-1980) may however require additional maintenance or modification. Vehicle owners are encouraged to check their owners' manuals to obtain definitive information regarding the use of ethanol-blended gasoline.

Will the use of E10 gasoline affect fuel consumption?

E10 typically has about 3% lower energy content than pure gasoline. Because E10 is an oxygenated fuel however, it can improve combustion efficiency in many vehicles. The net effect on fuel economy may therefore be marginal.

Can I use ethanol-blended fuel in recreational vehicles and small engines?

Some engine and fuel-systems may have components (tanks and fuel lines) that could degrade because of the solvent quality of ethanol. Individuals are strongly encouraged to check their owner's manual and warranties to obtain definitive information regarding the use of ethanol-blended gasoline with any equipment. This may be especially true in the case of older engines and two-stroke engines.

In all cases, owners should be aware of water contamination, including the possibility of condensation forming in the fuel tank, if ethanol-blended fuel is used, and take precautions against it. Partially full tanks are more susceptible to this. If an ethanol blend is not appropriate for use, the owner should check with the retailer to determine whether a non-blended gasoline is available. Premium-grade gasoline may be an acceptable alternative.

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