E10 FACT SHEET

Q: What is Ethanol?

A: Ethanol is an alcohol which may be produced from biomass such as sugar cane, wheat or other grains, thus this ethanol is renewable.

Q: What does Jamaica use to produce ethanol?

A: Jamaica uses the by-product molasses from the sugarcane to produce ethanol for the spirits industry but fuel ethanol is usually produced directly from the pressed cane juice.

Q: What is E10?

A: E10 is gasoline blended with 10% ethanol. Ethanol contains oxygen which raises the octane level of gasoline to prevent engine knocking.

Q: What are some of the benefits of using ethanol in a motor vehicle?

A: Ethanol can help maximize the performance and acceleration potential of many modern cars when used. It is allows gasoline to burn cleaner thereby reducing tailpipe emissions, such as particulate matter from incomplete combustion. Though burning ethanol produces carbon dioxide, the crops that ethanol is produced from absorb carbon dioxide so the greenhouse gas is recycled therefore the process is Carbon neutral.

Q: Why the introduction of ethanol in gasoline (E10) for Jamaica?

A: Ethanol is being introduced as a substitute for MTBE in gasoline, since the cumulative effect of the latter had been shown to be harmful to the environment.

Q: Does the use of ethanol create engine corrosion over time?

A: The potential for corrosion due to ethanol has, in the past, been due to improper use by retailers of lower quality ethanol at inappropriate blend ratios without corrosion protection. In Jamaica, anti-corrosion agent will be added to the ethanol before blending with gasoline.

Q: How does Ethanol work in my engine?

A: Ethanol has a high octane (Research and Motor Octanes) and as such ethanol based fuels have a natural tendency to resist compressive pre-combustion in engine combustion chambers. Its incorporation into fuel, in controlled quantities, will have the effect of lifting octane and allowing exposure to greater heat and compression in engines without 'pinging' (pre-combustion).

Q: Will the use of ethanol void my car's warranty?

A: All manufacturers (through the Automobile Dealers Association) approve the use of E10.

Q: Will ethanol work in fuel injected engines?

A: Ethanol does not contribute to burning or fouling of port fuel injectors. Fuel injectors are manufactured to very exact tolerances, so it takes a very small amount of deposits to affect the efficiency of an injector. Since 1985, all ethanol blends and nearly all non-ethanol gasoline have contained detergent additives that are designed to prevent injector deposits. Ethanol itself acts as a detergent.

Q: Will ethanol burn my engine valves?

A: Ethanol will not burn engine valves. Ethanol actually burns cooler than gasoline. Many high-powered racing engines use pure alcohol for that reason.

Q: Will ethanol hurt my older engine designed for leaded gas (Classic Car)?

A: No. The concern about older engines came about because of the lead phase-out. Lead oxides that were formed during combustion provided a cushion that reduced wear on non-case-hardened "popet" style valve seats.
In general, 1980 and later models years should not experience problems with E10. Fuel systems in the 1975 to 1980 model years were upgraded, but not to the same extent as later models. Pre-1975 models may have fuel components that are sensitive to high aromatic gasolines, alcohols and ethers. Specific documentation on the effect fuel components have on older fuel system parts is often lacking. However, if these systems have handled the aggressive gasoline components in unleaded gasoline which has been mandated in Jamaica since 2001, they should encounter no problems handling E10 (Petrojam).

Q: Which other countries use E10?

A: Many countries including the United States, Canada, Dominican Republic and Australia use E10.

Q: Can E10 be used in my lawn mower, chainsaw or other small engines?

A: Small engine equipment can use E10 gasoline. It is advised to store the gasoline away from water.

Q: How does Ethanol production from sugar cane compare to production from corn?

A: Production of ethanol from sugar cane is four times more energy efficient than ethanol produced from corn.

Q) What are the plans for E25 and E85?

A: The Ministry of Energy has this matter under consideration.