# E10 petrol



#### What is E10 petrol?



E10 petrol is so named as it contains up to 10% renewable ethanol, which will help to reduce carbon dioxide (CO2) and Nitrogen Oxide (NOx) emissions associated with petrol vehicles.

Generally most unleaded Petrol in the UK has contained up to 5% renewable ethanol (known as E5). From September 1st, 2021, E10 will be standard in all filling stations across the UK to help tackle climate change.

#### Does this affect me?

Yes. E10 will increase everyone's fuel consumption as ethanol contains less energy than petrol. The risks of E10 are generally only for older petrol cars (pre-2010) with estimates of over 600,000 cars being affected in the UK alone.

You can check your vehicle at https://www.gov.uk/check-vehicle-e10-petrol to see if you are affected by this change.

## What problems does E10 cause and why?

The main problem with E10 is that the additional ethanol content encourages separate layers of water and fuel to form in the tank. This was less of a problem with the old E5 standard.

All fuels at the pump contain small doses of water. However, extra water is gained over time in fuel tanks purely from condensation, which is unavoidable. This extra water typically gathers and sits in a separate layer at the bottom of the fuel tank where the fuel line draws from.

Ethanol prefers to mix with water as opposed to petrol and where there is sufficient of both, the ethanol will leave the petrol and preferentially combine with the water and form an even larger separate layer at the bottom of the tank.

The fuel line then draws from this watery alcohol mixture and is pumped directly into the engine causing damage and breakdowns. This is often the cause of cars going into "limp home mode" over the winter.

E10 is just going to exacerbate this issue because more ethanol encourages separation.

#### **Increased costs & reduced performance**

Ethanol contains about one third less energy than petrol. Therefore, adding more ethanol to petrol means reducing the overall energy content of petrol by about 2%. This may lead to higher fuel consumption and potentially a loss of performance in certain cars with the new E10.

### **The Solution: ElimiNOX Eco™ Petrol Conditioner**

The problems with E10 arise from water and ethanol separating out from the petrol. ElimiNOX Eco<sup>™</sup> Petrol Conditioner removes these problems by making sure the petrol, water and ethanol all mix better to prevent separation.

ElimiNOX Eco<sup>™</sup> Petrol Conditioner lifts the water from the bottom of the tank and redisperses it throughout the fuel. Properly dispersed water means that the ethanol cannot combine in a single phase with it and separate out.

Preventing this separate watery alcohol phase from forming is the key to removing the problems with E10. Your car is therefore protected from the inconvenience and costs of a breakdown and subsequent maintenance & recovery.

#### Warranty and Compatibility

Petrol treated with ElimiNOX Eco<sup>™</sup> Petrol Conditioner is Certified by Bureau Veritas to retain compliance with EN228 gasoline (E5 and E10) maintaining the integrity of your engine warranty.

# Using ElimiNOX Eco<sup>™</sup> Petrol Conditioner each time you fill up with E10 also offers ongoing protection.

Manufactured under licence by Nouryon BV, ElimiNOX Eco™ Petrol Conditioner is a brand new, all natural Greentech. No add alcohols or fossil fuel accelerants, only biodegradable, non bio-accumulative, sustainable products.

Conditioning E10 petrol with ElimiNOX Eco<sup>™</sup> Petrol Conditioner provides more than just protection from E10 including:

- Improved fuel economy from improved combustion efficiency \*
- Reduced emissions [c. 30% CO2 and other greenhouse gases] and less visible smoke
- Lubricity improved >30% means engines rev more freely with significant extension to the life of engine lubricant oils, leading to a substantial reduction in engine wear
- Reduces corrosion from ethanol and extends the life of fuel hoses, fuel pumps, fuel dampers, seals, gaskets, diaphragms and other rubber parts.

#### \* Spend 2p and save 5p - > £2 for every 50 litres of fuel



**Head Office** 

Melbreak, Upton Magna Business Park, Shrewsbury, Shropshire, SY4 4TT. t +44 (0)7980 443 521 Email - enquires@eliminox.co.uk

www.eliminox.co.uk





Winners - UKIFDA 2022 Innovation Award

Bureau Veritas Certified: Fuel treated with ElimiNOX Eco™ retains compliance with EN590/ASTM D975/ IS1460 for diesel and EN 228 / ASTM D4814/ IS2896 for petrol.