Clean Air HVO Renewable Diesel - Frequently Asked Questions

As we continue to introduce our new 'Clean Air HVO Renewable Diesel' to customers across Northern Ireland we are happy to answer any questions you might have. You can contact us by calling 08000 22 44 22, or send us an Email to info@nicholloils.com or alternatively you can take a look at our pre-prepared Frequently Asked Questions below to help you understand our new fuel and hopefully you will join us on the road to a greener future.



1. What is HVO Fuel?

HVO (hydrotreated vegetable oil), or the Nicholl Brand, "Clean Air HVO Renewable Diesel", is a premium, renewable, high quality diesel fuel manufactured from sustainable raw materials. We are very proud to say that our new fuel will not release any new CO2 into the atmosphere.

HVO is part of the paraffinic family of fuels which are renewable, sustainable and high quality and therefore makes it perfectly suited for a wide range of applications including passenger, heavy duty and off road vehicles, generators and commercial boilers. The materials used to produce Clean Air HVO Renewable Diesel is 100% waste, taken from products that will cause no lasting damage to our environment. All our raw materials have been checked and verified, and the fuel's credentials audited by the Department for Transport (DFT) to ensure both sustainability and product integrity are certified.

2. What is a Paraffinic Diesel?

Paraffinic diesels are a more high-quality, synthetic clean liquid fuel. Clean Air HVO Renewable Diesel is considered a paraffinic fuel which is characterised by having low aromatic and naphthenic hydrocarbon content and zero sulphur, which makes it an extremely pure fuel. Our Clean Air HVO Renewable Diesel is produced from vegetable oils or animal fats using a specialist hydrotreatment manufacturing process and its purity allows it to reduce harmful emissions when used in cars, trucks and other machinery.

3. Is Clean Air HVO Renewable Diesel fuel better than regular diesel?

We, along with many other businesses are now working to do our part with regards to climate change and reducing our carbon footprint. Our new Clean Air HVO Renewable Diesel with play a vital role in helping people and businesses reduce their personal carbon footprint across Northern Ireland.

We are leading by example and are starting to fuel our own Nicholl Oils delivery fleet with Clean Air HVO Renewable Diesel as it is better for the environment and we will be keen to see how many 'Emission Free' miles our drivers clock up over the coming years.

4. Can I download a specification sheet for Clean Air HVO Renewable Diesel?

Yes, **click here** to download a copy of our product specification sheet.

5. How is Clean Air HVO Renewable Diesel made?

Clean Air HVO Renewable Diesel is made by hydrotreating vegetable oils from completely renewable materials which, when needed, can be regrown and completely neglect any damage to the environment. There are a number of methods used in order to produce renewable fuels, such as transesterification or fermentation. The renewable diesel is manufactured in a two-stage process known as hydrotreatment, this is where feedstocks are saturated with hydrogen at high leaving behind the desired fuel qualities that we are proud to have in our Nicholl product portfolio.

The highly controlled HVO fuel production process ensures a consistent and high-quality product that can be stored for longer, roughly 10 years, than a regular diesel which has a shelf life of approximately 1 year.

Clean Air HVO Renewable Diesel is produced from various waste streams, such as plant and animal matter. Plants are grown and oils are taken away and are used for their main purpose, they are then recollected and then converted into Clean Air HVO Renewable Diesel.

6. What is Fame Diesel?

Fame Diesel is a first generation bio-diesel and is produced by esterifying natural vegetable oils or animal fats with methanol to make bio-diesel and glycerol. In order to meet the governments road fuel regulations the glycerol is removed. Fame Diesel is susceptible to water, oxygen and the diesel bug and if stored for long periods of time can become sludge like.

Currently first generation biodiesel aged to fuels is increased each year by the government, however this is showing increasing issues with storing fuel and its operation performance.

Clean Air HVO Renewable Diesel meets the RTFO and can be used as a 100% fuel as it has no added products of a first generation biodiesel and in turn takes away any potential operational issues that arise when using this type of fuel.

7. What is the difference between FAME and HVO fuel?

The differences can be found, for example, in their production process, cleanliness, and quality. Premium-quality, HVO-type Neste Renewable Diesel is made primarily from waste and residues. Traditional, first-generation FAME-type biodiesel, on the other hand, is produced by esterifying vegetable oils or fats.

8. Can HVO reduce emissions?

Our Clean Air HVO Renewable Diesel can reduce emissions by up to 90%. For example, the average driver drives 12,000 miles a year. If the driver were to fuel up with our Clean Air HVO Renewable Diesel up to 10,800 of those miles would emission free.

We are leading the way in Northern Ireland in order to reduce the emissions produced by our fleet and are making the switch to Clean Air HVO Renewable Diesel.

9. What are the advantages of HVO?

- Up to 90% reduction in net co2 greenhouse emissions meaning the fuel is significantly better for the environment than a regular diesel or biodiesel.
- Great cold weather vehicle performance due to the higher cetane number which is up to 90 and a low cloud point gives a better starting performance, less chance of any waxing in extreme temperatures and a clean combustion.
- Manufactured from waste fats and vegetable oils makes our Clean Air HVO renewable and sustainable.

- High flashpoint meaning it is safer for storage and handling compared to regular diesel.
- As a replacement for regular diesel and gas oil a wide variety of OEM approvals means the fuel can be used without requiring any vehicle modifications meeting EN15940 standards required for paraffinic fuels.
- Clean Air HVO Renewable Diesel will also result in improved air quality as it reduces any notifiable particulate matter and nitrogen oxide emissions.

10. What is the cetane number of diesel?

Regular diesel has a cetane number of 51 and FAME biodiesel has a number between 50 and 65.

Clean Air HVO Renewable Diesel has a number between 70 and 90 providing a better starting performance, less waxing in extreme weather and a clean combustion.

11. Does HVO fuel have any other uses?

Yes, Clean Air HVO Renewable Diesel is suitable for use in the following:

- Construction Machinery
- Agricultural Machinery
- Commercial Boilers
- Portable Generators
- Boats and Vessels
- Industrial Trucks and Tankers

12. Can I run my vehicle entirely on Clean Air HVO Renewable Diesel?

Yes, you can indeed fuel your car entirely with our Clean Air HVO Renewable Diesel. If you are unsure if your vehicle is approved for using Clean Air HVO Renewable Diesel then we recommend you contact your vehicle manufacturer.

13. Can I mix HVO fuel with diesel?

Yes, HVO fuel can be mixed with mineral diesel and therefore you can simply top up your tank with your existing fuel stock. The HVO benefits can be lost if they are mixed due to the diesel's properties. We do advice starting with a clean tank of HVO to ensure its long storage life and quality.

14. What additional infrastructure is needed for HVO fuel?

You will not have to make any amendments to your existing infrastructure. Paraffinic fuels can be blended with your current stocks without having to empty tanks which will be a cost saving benefit.

15. Will HVO fuel harm my engine?

Our Clean Air HVO Renewable Diesel is suitable for use in most diesel engines but we do advise that you check with the vehicle manufacturer.

Clean Air HVO Renewable Diesel has been approved by the following OEM;

Heavy Duty Road Vehicles















Passenger Cars













Non-Road Vehicles











Want to know if your vehicle can use Clean Air HVO Renewable Diesel? Check your vehicle handbook or contact your manufacturer.

16. How long can I store HVO fuel?

If good tank maintenance and storage conditions are upheld, HVO can be stored for up to 10 years but we recommend regular checks on both the fuel and your tank. The chance of the fuel degrading is lower than with regular mineral diesel which can only be stored for up to one year.

17. Is HVO fuel toxic?

Clean Air HVO Renewable Diesel is non-toxic, odourless and made from 100% renewable waste products. Tried and tested, clean, safe to use and now available for purchase to customers.

18. What other countries are using HVO fuels?

Sweden are very much in favour of HVO fuel. In October 2017 they saw a 124% increase in HVO fuel sales on the previous October. They also plan to reduce the climate impact of the transport sector by 70% (excluding aviation) and to have a fossil-fuel-free vehicle fleet by 2030, that's just 9 years from now!

19. What is the price of HVO fuel?

For further information with regards to the price of HVO fuel please contact our Retail Petrol and Wholesale Manager, Margaret Gallagher;

Office: 028 1471 3119

Mobile: 07769180625

Email: Margaret.gallagher@nicholloils.com

20. Where can I get HVO fuel?

We are the only distributor of HVO fuel in Northern Ireland and our Clean Air HVO Renewable Diesel is now readily available for purchase at our Nicholl Automated 365 Forecourt on the Saintfield Road in Carryduff. We have a structured roadmap developed in order to roll Clean Air HVO Renewable Diesel across our Nicholl Auto 365 Forecourts. We will also make the fuel available to our STAR branded retailers and beyond.

21. Who can purchase HVO fuel?

Our Clean Air HVO Renewable Diesel will be available to everyone. Our customers can contact our commercial fuels team on 08000 22 44 22 (Select option 2) and we can arrange a delivery.

Domestic customers will be able to fuel their vehicles at our forecourt on the Saintfield Road, Carryduff and Nicholl Oils will continue to roll the new fuel across their network of forecourts.

22. Does HVO contain Palm Oils?

No, our Clean Air HVO Renewable Diesel does not contain palm oils. Proof of sustainability is very important to use to ensure our customers only get the best fuel products from Nicholl Oils. In almost 60 years we have taken great pride in providing the people of Northern Ireland with the best quality fuel products and we will continue to do so.

23. Does HVO comply with a British Standard?

Yes, our Clean Air HVO Renewable Diesel complies with BS EN 15940. The British Standard for paraffinic diesel fuel.