

OnBio

Powered by good energy

HVO
100% HVO Spec
Up to 86% less CO2 emissions
ISCC-EU & RFAS Certified
EN15940 Standardised

HVO

OnBio specialises in the use of HVO in film unit lighting generators, mini buses, diesel unit cars, site generators and plant machinery. We are trusted throughout the industry as the leading experts in delivering any volume of high quality HVO fuels. This exciting new fuel is:

- Is fully compatible with all diesel engines
- Has excellent cold weather properties
- Can be stored in existing diesel storage tanks without any alterations
- Mixes perfectly with conventional diesel and has no blending limit
- Does not promote bacteria growth and has the same shelf life as conventional diesel
- Approved for use in Volvo's Euro 5 & 6 engines
- Meets EN15940 standard for paraffinic diesel from synthesis or hydrotreatment & ASTM D975

Compatible with any diesel engine

HVO is not a biodiesel. It is known as HVO (Hydrotreated Vegetable Oil) or sometimes Renewable Diesel, it is made from the same raw materials as biodiesel, but is 'cracked' with hydrogen making it a paraffinic fuel with a chemical structure comparable with conventional diesel by meeting the US diesel standard ASTM D975.

High Performing

HVO's high cetane range of 75 – 95 ensures an efficient and clean combustion.

Ultra-Low Carbon - up to 86% CO2 Reduction

Product	Diesel Engine Compatible	Hydrocarbon Fuel	ISCC Certified	Co_2 Saving	NO_2 Reduction	PM Reduction
HVO	✓	✓	✓	up to 86%	7 to 37%	51 to 98%
Diesel	✓	✓	✗	0%	0%	0%

What are HVO's Green Credentials?

Not all HVO is equal. We ONLY purchase HVO made from renewable inedible waste, such as used cooking oil. OnBio is a member of the Renewable Fuel Assurance Scheme and we are audited to ensure all the HVO we purchase is fully certified and does not contribute to deforestation or compete with food production.

Less Polluting

HVO has lower harmful emissions than conventional diesel and can make a valuable contribution to improving local air quality, particularly when used at 100%*. Compared with conventional diesel, using HVO reduces:

- **Particulate matter (PM) by 51 to 98%**
- **Nitrogen oxides (NOx) by 7 to 37%**

*These average emission reduction figures are derived from studies on 100% Neste HVO. Findings are published in over 40 scientific publications.

ONBIO.CO.UK
01494 326 922
fuelorders@onbio.co.uk

OnBio
Renewable Fuel Services

Typical properties of pure HVO and how it relates to EN 15940 and EN 590 standard.

Property		HVO (typical NESTE Renewable Diesel)	EN 15940	EN 590
Appearance at +25 °C		Clear & Bright		
Cetane number		> 70.0	≥ 70.0	≥ 51.0
Density at +15 °C	kg/m^3	770.0 ... 790.0	765.0 ... 800.0	820.0 ... 845.0 ≥ 800.0
Total aromatics	% (m/m)	< 1.0	≤ 1.0	
Polyaromatics	% (m/m)	< 0.1		≤8
Sulfur	mg/kg	< 5.0	≤ 5.0	≤ 10.0
FAME-content	% (V/V)	0	≤ 7.0	≤ 7.0
Flash point	°C	> 61	> 55	> 55
Carbon residue on 10 % distillation	% (m/m)	< 0.10	≤ 0.30	≤ 0.30
Ash	% (m/m)	< 0.001	≤ 0.01	≤ 0.01
Water	mg/kg	< 200	≤ 200	≤ 200
Total contamination	mg/kg	< 10	≤ 24	≤ 24
Copper corrosion		Class 1	Class 1	Class 1
Oxidation stability	g/m^3	< 25	≤ 25	≤ 25
Lubricity HFRR at +60 °C	mm	≤460	≤ 460	≤ 460
Viscosity at +40 °C	mm^2/s	2.00 ... 4.00	2.00 ... 4.50	2.00 ... 4.50 ≥ 1.20 *
Distillation 95 % (v/v)	°C	< 320	≤ 360	≤ 360
Final boiling point	°C	< 330		
Cloud point and CFPP	°C	As needed -5 ... -34	As in EN 590	Down to -34

Renewable Diesel is now available in the UK though OnBio Ltd.
For a quotation please call 01494 326 922
or email fuelorders@onbio.co.uk.