



Introducing Renewable Diesel

OnBio Ltd specialise in the use of Renewable Diesel in film unit generators and heaters, refined by Neste, the world's largest renewable diesel producer. This exciting new fuel is:

Compatible with all Diesel Engines

Renewable Diesel is not a biodiesel. Known as an HVO or Hydrotreated Vegetable Oil, it is a paraffinic fuel made from the same raw materials as biodiesel, but has a chemical structure comparable with red diesel.

Renewable Diesel:

- Meets EN 15940 standard for paraffinic diesel from synthesis or hydrotreatment.
- Is fully compatible with diesel engines.
- Can be stored in existing red diesel tanks without any alterations.
- Mixes perfectly with red diesel and has no blending limits or shelf life.
- Has been approved for use in Volvo's Euro 5 & Euro 6 engines.
- Has excellent cold weather properties, with the same CFPP as red diesel.

Ultra Low Carbon

Using ECO+ Renewable Diesel in place of red diesel reduces greenhouse gas emissions by up to 90%*

ISCC EU Certified

Every delivery comes with its own ISCC EU certificate proving it is refined from 100% renewable inedible waste and residue feedstock, which does not contribute to deforestation or compete with food production.

Better Performing

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

Less Polluting

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

- Particulate matter (PM) by 33%
- Nitrogen oxides (NOx) by 9%
- Carbon monoxide (CO) by 24%
- Hydrocarbons (HC) by 30%
- Carbon Dioxide (CO₂) by 80%

* Data is taken from the UK Government's Organisation Greenhouse Gas reporting formulae.

** These average emission reduction figures are derived from studies on Neste Renewable Diesel and HVO fuels when 100% Neste Renewable Diesel has been used as the fuel. Findings are published in over 40 scientific publications

Renewable Diesel is available in the UK through OnBio Ltd.

For more information & prices please contact us on 07787 113 682 or via email at

fuel@onbio.co.uk



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

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