HVO100 - HVOlution

HVOlution is the Hydrotreated Vegetable Oil (HVO) produced by Eni, a diesel fuel containing 100% of renewable* component.

HVOlution is composed by a mixture of stable non-hygroscopic paraffins, and therefore it's poorly subject to bacterial contamination.

Thanks to its nature, it can be mixed to fossil diesel fuel in high percentages, even much higher than 7% allowed by the European standard EN 590 for traditional biodiesel (FAME).

Free of aromatics and polyaromatics, compounds with an environmental impact, **HVOlution** complies with the European specification EN15940:2023 for paraffinic diesel fuel from synthesis or hydrotreatment (XTL).

*The feedstocks used by Eni for **HVOlution** production falls within the definition of renewable raw materials pursuant to Directive (EU) 2018/2001, so-called 'REDII'.

PROPERTIES

Properties	Unit	Values		Method
		Min	Max	
Appearance	-	clear&bright		ASTM D 4176
Density at 15°C	kg/m³	765.0	800.0	EN ISO 12185 EN ISO 3675
Cetane number	-	70.0		EN ISO 5165
Distillation	-	-	-	EN ISO 3405 EN ISO 3924
Initial boiling point	°C	-		EN ISO 3405 EN ISO 3924
Recovered at 150°C	% (v/v)		2	EN ISO 3405 EN ISO 3924
Recovered at 250°C	% (v/v)		65	EN ISO 3405 EN ISO 3924
Recovered at 350°C	% (v/v)	85		EN ISO 3405 EN ISO 3924
95% (v/v) recovered at	°C		360.0	EN ISO 3405 EN ISO 3924
Flash point	°C	> 55.0		EN ISO 2719
Aromatics	% (m/m)		1.1	EN ISO 12916
Viscosity at 40°C	mm²/s	2.000	4.500	EN ISO 3104

HVOlution

Properties	Unit	Min	Max	Method
Cloud Point	°C	-		EN ISO 23015
C.F.P.P., 16/03 - 14/11	°C		0	EN 116 EN 16329
C.F.P.P., 15/11 - 15/03	°C		-10	EN 116 EN 16329
Sulphur	mg/kg		5.0	EN ISO 20846 EN ISO 20884
Copper strip corrosion (3h at 50°C)	index	Class 1		EN ISO 2160
Carbon residue (10% residue)	% (m/m)		0.30	EN ISO 10370
Ash content	%(m/m)		0.010	EN ISO 6245
Water content	mg/kg		200	EN ISO 12937
Lubricity	µm		400	EN ISO 12156
Oxidation stability	g/m³		25	EN ISO 12205
Total contamination	mg/kg		24	EN 12662
FAME content	% v/v	absent		EN 14078
Manganese content	mg/l		2.0	EN 16576
Electrical conductivity at 20°C	pS/m	50		EN ISO 6297 ASTM D 2624

The methods of analysis indicated for the same characteristic have to be understood as alternatives.

The limit relating to recovery at 150 °C is applicable if the flash point determined according to the EN ISO 2719 method is lower than 65°C.

The FAME content is 'absent' if it is less than 0.5% vol.

No metallic additives are added in production.