



HVO (Hydrotreated Vegetable Oil)

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 PRODUCT IDENTIFIER

Product form:	Substance (UVCB)
Substance name:	Hydrotreated Vegetable Oil
IUPAC name:	Renewable hydrocarbons (diesel type fraction)
EC-No.:	700-571-2
UK-REACH registration No:	UK-01-5356785410-3-0001

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

1.2.1. Relevant identified uses

Use of the substance/mixture:	Use as an intermediate Formulation & (re)packing of substances and mixtures Distribution of substance Use as a fuel
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1.2.2. Uses advised against:

No additional information available

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company name:	New Era Energy Riverview House, River Way, Harlow, Essex CM20 2EA
Tel:	+44 (0) 1279 425 757
Email:	sales@newera-energy.co.uk

1.4. EMERGENCY TELEPHONE NUMBER

Emergency Tel:	+44 (0) 1279 425 757 (8am to 5.30pm)
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Section 2: Hazards identification

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No. 1272[CLP]//2008 GB [CLP]

Aspiration hazard, Category 1 H304

Full text of H- and EUH-statements: see section 16



HVO (Hydrotreated Vegetable Oil)

Adverse physicochemical, human health and environmental effects

May be fatal if swallowed and enters airways.

2.2. LABEL ELEMENTS

Labelling according to Regulation (EC) 1272/2008 [CLP]

Hazard pictograms (CLP):



Signal word (CLP):

GHS08

Danger.

Hazard statements (CLP):

H304 - May be fatal if swallowed and enters airways.

Precautionary statements (CLP):

P301+P310 - IF SWALLOWED:

Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local/national regulation.

2.3. OTHER HAZARDS

This substance/mixture does not meet the PBT criteria of (UK) REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of (UK) REACH regulation, annex XIII

Section 3: Composition/information on ingredients

3.1. SUBSTANCES

Substance type: UVCB

Name	Product identifier	%
Hydrotreated Vegetable Oil	EC-No.: 700-571-2 UK-REACH-no: UK-01-5356785410-3-0001	100

Comments: Mixture of renewable raw material fuel and additives. Contains middle distillate-range iso and n-paraffinic hydrocarbons. Total aromatics at maximum 1,0 Weight %, Renewable hydrocarbons (diesel type fraction). Identity outside the EU (CAS number and name of the substance);, Alkanes, C10-20-branched and linear, CAS 928771-01-1.

3.2. MIXTURES

Not applicable

HVO (Hydrotreated Vegetable Oil)



Section 4: First aid measures

4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures general:	Call a physician immediately.
First-aid measures after inhalation:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact:	Wash skin with plenty of water.
First-aid measures after eye contact:	Rinse eyes with water as a precaution.
First-aid measures after ingestion:	Do not induce vomiting. Call a physician immediately.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms/effects after ingestion:	Risk of lung oedema.
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4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

Section 5: Fire-fighting measures

5.1. EXTINGUISHING MEDIA

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazards decomposition products in case of fire: Toxic fumes may be released.

5.3. ADVICE FOR FIRE-FIGHTERS

Protective equipment for firefighters:

Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Section 6: Accidental release measures

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area..

HVO (Hydrotreated Vegetable Oil)



6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment.
For further information refer to section 8: "Exposure controls/personal protection".

6.2. ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Methods for cleaning up: Take up liquid spill into absorbent material.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. REFERENCE TO OTHER SECTIONS

For further information refer to section 13.

Section 7: Handling and storage

7.1. PRECAUTIONS FOR SAFE HANDLING

Precautions for safe handling:

Ensure good ventilation of the work station. Wear personal protective equipment. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons). Use only outdoors or in a well-ventilated area. Avoid inhalation of vapours. Avoid contact with skin and eyes. Take precautionary measures against static discharge.

Hygiene measures:

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage:

Store locked up. Store in a well-ventilated place. Keep cool. Store in accordance with: local regulations. Use containers made of the following materials: Carbon steel. Stainless steel. Keep containers tightly closed and properly labelled. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

7.3. SPECIFIC END USE(S)

Specific end use(s): No additional information available.

HVO (Hydrotreated Vegetable Oil)



Section 8: Exposure controls/personal protection

8.1. CONTROL PARAMETERS

8.1.1. National occupational exposure and biological limit values

No additional information available.

8.1.2. Recommended monitoring procedures

No additional information available.

8.1.3. Air contaminants formed

No additional information available.

8.1.4. DNEL and PNEC

Hydrotreated Vegetable Oil	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	42 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	147 mg/m ³
DNEL/DMEL (General population):	
Long-term - systemic effects, oral	18 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	94 mg/m ³
Long-term - systemic effects, dermal	18 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.01 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3810 mg/kg dwt
PNEC sediment (marine water)	3.73 mg/kg dwt
PNEC (Soil)	
PNEC soil	761 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

8.1.5. Control banding

No additional information available

8.2. EXPOSURE CONTROLS

8.2.1. Appropriate engineering controls

Ensure good ventilation of the work station.

HVO (Hydrotreated Vegetable Oil)



8.2.2. Personal protection equipment

Wear eye protection.
Wear protective gloves.
Wear respiratory protection.
Wear protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Wear eye protection

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Chemical resistant gloves (nitrile-rubber, PVC, neoprene)

8.2.2.3. Respiratory protection: Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Filter type: P2. A2

8.2.2.4. Thermal hazards: No additional information available

8.2.3. Environmental exposure controls: Avoid release to the environment.

Section 9: Physical and chemical properties

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	Clear
Colour:	Not determined
Odour:	Mild
Odour threshold:	Not determined
pH:	Not determined
Relative evaporation rate (butylacetate=1):	Not determined
Melting point:	< -20 °C @ 1013 hPa (BS4633, EC A1)
Freezing point:	Not determined
Boiling point:	142 – 395 °C ASTM D2887
Flash point:	> 61 °C (EN ISO 2719, EC A9)
Auto-ignition temperature:	204 °C (EC A15)
Decomposition temperature:	Not determined
Flammability (solid, gas):	Not flammable
Vapour pressure:	0.087 kPa 25°C (EC A4)



HVO (Hydrotreated Vegetable Oil)

Relative vapour density at 20 °C:	Not determined
Relative density:	Not determined
Density:	0.77 – 0.79 @ 15/4°C (EN ISO 12185, EC A3)
Solubility:	Water: 0.075 mg/l @ 25°C (calculated)
Partition coefficient n-octanol/water (Log Pow):	Not determined
Partition coefficient n-octanol/water (Log Kow):	> 6.5 (EC A8)
Viscosity, kinematic:	4 mm ² /s @ 20°C 2.6 mm ² /s @ 40°C (OECD 114)
Viscosity, dynamic:	≤ 5 mPa.s @ 20°C
Explosive properties:	Not explosive. (EC A14)
Oxidising properties:	Not oxidising.
Lower explosive limit (LEL):	Not determined
Upper explosive limit (UEL):	Not determined
Particle size:	Not applicable to liquids

9.2. OTHER INFORMATION

No additional information available.

Section 10: Stability and reactivity

10.1. REACTIVITY

The product is non-reactive under normal conditions of use, storage and transport..

10.2. CHEMICAL STABILITY

Stable under normal conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use..

10.4. CONDITIONS TO AVOID

Heat. flames. Sparks..

10.5. INCOMPATIBLE MATERIALS

Oxidising agents..

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Under normal of storage and use, hazardous decomposition products should not be produced.

HVO (Hydrotreated Vegetable Oil)



Section 11: Toxicological information

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity (oral):	Not classified
Acute toxicity (dermal):	Not classified
Acute toxicity (inhalation):	Not classified.

Hydrotreated Vegetable Oil	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Remarks on results: other:

Skin corrosion/irritation:	Not classified pH: Not determined
Serious eye damage/irritation:	Not classified pH: Not determined
Respiratory or skin sensitisation:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT-single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	May be fatal if swallowed and enters airways

Hydrotreated Vegetable Oil	
Viscosity, kinematic	4 mm ² /s @ 20°C 2.6 mm ² /s @ 40°C (OECD 114)

Section 12: Ecological information

12.1. TOXICITY

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

Hydrotreated Vegetable Oil	
LC50 - Fish [1]	> 1000 mg/l WAF (OECD 203)
EC50 - Crustacea [1]	> 100 mg/l WAF (OECD 202)
EC50 72h - Algae [1]	> 100 mg/l WAF (OECD 201)



HVO (Hydrotreated Vegetable Oil)

12.2. PERSISTENCE AND DEGRADABILITY

Hydrotreated Vegetable Oil	
Persistence and degradability	Readily biodegradable (OECD 301B)

12.3. BIOACCUMULATIVE POTENTIAL

Hydrotreated Vegetable Oil	
Bioconcentration factor (BCF REACH)	116
Partition coefficient n-octanol/water (Log Kow)	> 6.5 (EC A8)
Bioaccumulative potential	Possibly bioaccumulative

12.4. MOBILITY IN SOIL

No additional information available.

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

Hydrotreated Vegetable Oil	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. OTHER ADVERSE EFFECTS

No additional information available.

Section 13: Disposal considerations

13.1. WASTE TREATMENT METHODS

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Section 14: Transport Information

In accordance with ADR / IMDG / IATA / ADN / RID

	ADR	IMDG	IATA	ADN	RID
14.1 UN Number	UN 1202	Not regulated	UN 1202	UN 1202	UN 1202
14.2 UN Proper Shipping Name	DIESEL FUEL	Not regulated	DIESEL FUEL	DIESEL FUEL	DIESEL FUEL
14.3 Transport Document Description	UN 1202 DIESEL FUEL (Neste Renewable Diesel), 3, III, (D/E)	Not regulated	UN 1202 DIESEL FUEL (Neste Renewable Diesel), 3, III	UN 1202 DIESEL FUEL (Neste Renewable Diesel), 3, III	UN 1202 DIESEL FUEL (Neste Renewable Diesel), 3, III
	3	Not regulated	3	3	3
					



HVO (Hydrotreated Vegetable Oil)

14.4 Packing Group	III	Not regulated	III	III	III
14.5 Environmental Hazards	Dangerous for the environment: No	Not regulated	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

No supplementary information available.

14.6. SPECIAL PRECAUTIONS FOR USER

Overland transport

Classification code (ADR):	F1
Special provisions (ADR):	640M, 664
Limited quantities (ADR):	5I
Excepted quantities (ADR):	E1
Packing instructions (ADR):	P001, IBC03, LP01, R001
Mixed packing provisions (ADR):	MP19
Portable tank and bulk container instructions (ADR):	T2
Portable tank and bulk container special provisions (ADR):	TP1
Tank code (ADR):	LGBV
Vehicle for tank carriage:	AT
Transport category (ADR):	3
Special provisions for carriage - Packages (ADR):	V12
Hazard identification number (Kemler No.):	30
Orange plates:	30 1202
Tunnel restriction code (ADR):	D/E
EAC code:	3Y

Transport by sea

Not regulated

Air transport

PCA Excepted quantities (IATA):	E1
PCA Limited quantities (IATA):	Y344
PCA limited quantity max net quantity (IATA):	10L
PCA packing instructions (IATA):	355
PCA max net quantity (IATA):	60L
CAO packing instructions (IATA):	366
CAO max net quantity (IATA):	220L
Special provisions (IATA):	A3
ERG code (IATA):	3L



HVO (Hydrotreated Vegetable Oil)

Inland waterway transport

Classification code (ADN):	F1
Special provisions (ADN):	640M
Limited quantities:	5L
Excepted quantities (ADN):	E1
Carriage permitted (ADN):	T
Equipment required (ADN):	PP, EX, A
Ventilation (ADN):	VE01
Number of blue cones/lights (ADN):	0

Rail transport

Classification code (RID):	F1
Special provisions (RID):	640M
Limited quantities (RID):	5L
Excepted quantities (RID):	E1
Packing instructions (RID):	P001, IBC03, LP01, R001
Mixed packing provisions (RID):	MP19
Portable tank and bulk container instructions (RID):	T2
Portable tank and bulk container special provisions (RID):	TP1
Tank codes for RID tanks (RID):	LGBV
Transport category (RID):	3
Special provisions for carriage – Packages (RID):	W12
Colis express (express parcels) (RID):	CE4
Hazard identification number (RID):	30

14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE

Not applicable.

Section 15: Regulatory information

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	Hydrotreated Vegetable Oil

HVO (Hydrotreated Vegetable Oil)

**REACH Annex XIV (Authorisation List)**

Hydrotreated Vegetable Oil is not on the REACH Annex XIV List.

REACH Candidate List (SVHC)

Hydrotreated Vegetable Oil is not on the REACH Candidate List.

PIC Regulation (Prior Informed Consent)

Hydrotreated Vegetable Oil is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Hydrotreated Vegetable Oil is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

Ozone Regulation (1005/2009)

Hydrotreated Vegetable Oil is not subject to REGULATION (EU) No 1005/2009
OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009
on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list
(Regulation EC 273/2004 on drug precursors).

15.1.2. National regulations

United Kingdom

No additional information available

15.2. CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has not been carried out.

Section 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)



HVO (Hydrotreated Vegetable Oil)

Abbreviations and acronyms (continued):

COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Effective concentration for 50 percent of test population (median effective concentration)
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal concentration for 50 percent of test population (median lethal concentration)
LD50	Lethal dose for 50 percent of test population (median lethal dose)
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulation concerning the International Carriage of Dangerous Goods by Railways
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:

Asp. Tox.	1 Aspiration hazard, Category 1
H304	May be fatal if swallowed and enters airways

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



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