

SAFETY DATA SHEET

HVO (Hydrotreated Vegetable Oil) / Renewable Diesel

According to Regulation (EC) No. 1907/2006 as amended

Issued: 25/01/2022

Ref: WFS/ Watson Fuels/ HVO/ Renewable Diesel 02

Version: 02

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFIER

Chemical Identification: Renewable hydrocarbons (diesel type fraction)

Other names: HVO / Renewable Diesel

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

Relevant Identified Uses: Fuel for use in automotive vehicles

Uses advised against: This product is not to be used as a solvent or cleaning agent, for lighting or brightening fires, or as a skin cleanser.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier: Watson Fuels
Address: Callow Park
Callow Hill
Brinkworth
Chippenham
Wiltshire
SN15 5FD
UK
Tel: +44 1666 510 345
Email: hse@watsonfuels.co.uk

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone (24hr): +44 (0) 333 333 9957 (24/7)

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP)

Classification Asp. Tox. 1; H304

Please see section 16 for full hazard statements

2.2 LABEL ELEMENTS

ACCORDING TO REGULATION (EC) No. 1272/2008 (CLP)





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Signal Word:	Danger
Hazard statement(s):	H304: May be fatal if swallowed and enters airways. EUH066 Repeated exposure may cause skin dryness or cracking.
Precautionary statement(s):	P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P331: Do NOT induce vomiting. P501: Dispose of contents/container in accordance with local / national regulations.
Supplementary Hazard Information (EU):	None
Hazard Determining Component(s):	Fuels, diesel

2.3 OTHER HAZARDS:

Combustible liquid. Oil mist may irritate the eyes and the respiratory tract. Risk of soil and ground water contamination.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 MIXTURES

Preparation of renewable raw material diesel and additives. Contains middle distillate-range iso- and n-paraffinic hydrocarbons. Total aromatics at maximum 1,0 Weight %.

Identity outside the EU (CAS number and name of the substance): Alkanes, C10-20 -branched and linear, CAS 928771-01-1. Registration number, See chapter 1.1.2.

Chemical Name	CAS Number, EINECS Number	REACH Registration Number	Concentration	Classification
Renewable hydrocarbons (diesel type fraction)	928771-01-1	01-2119450077-42-0000 / -0001 / -0002	100	Asp. Tox. 1, H304

Please see section 16 for full hazard statements.

SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

General Advice:	Obtain medical attention if symptoms do not resolve. Show this safety data sheet to the doctor in attendance.
Inhalation:	If Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature. If spray/mist has been inhaled, proceed as follows.



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	Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.
Ingestion:	DO NOT INDUCE VOMITING. In case of ingestion, always assume that aspiration has occurred. Consult a physician (risk of aspiration into the lungs especially if nausea or irritation occurs).
Eye contact:	Remove contact lenses if present and easy to do. Wash eyes immediately with plenty of water, making sure to rinse under eyelids. If symptoms persist, obtain medical attention.
Skin contact:	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Repeated exposure may cause skin dryness or cracking. Spray/mists may cause respiratory tract irritation. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Aspiration into the lungs can cause fatal chemical pneumonitis.

SECTION 5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable: Water spray, foam, dry powder, or carbon dioxide.

Not suitable: Do not use a direct water jet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Combustible liquid. Explosion risk due to pressure increase if product containers or tanks are subjected to fire. Strong heating or fire can produce carbon monoxide and other products resulting from uncomplete combustion.

5.3 ADVICE FOR FIRE-FIGHTERS

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Eliminate fire risk by keeping ignition sources out of the area. Evacuate people upwind from the spill area. Wear adequate protective equipment at all operations.

6.2 ENVIRONMENTAL PRECAUTIONS

Try to restrict the release and prevent spread of the product into the environment. Collect liquid before it spreads into drains, the ground, and waters. In case of spill, immediately contact local authorities. Risk of soil and ground water contamination.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP



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Immediately start clean-up of the liquid and contaminated soil. Small amounts can be collected using absorbent material. Pay attention to the fire and health hazards caused by the product.

6.4 REFERENCE TO OTHER SECTIONS

For personal protection see section 8. Product waste should be disposed in accordance with section 13.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handle the product in closed systems or provide sufficient ventilation. Avoid skin contact and inhalation of oil mist. Wear protective equipment when needed. When using, do not eat, drink, or smoke. Wash hands before breaks and at the end of workday. Spillages make surfaces slippery. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

Keep away from fire, sparks, and heated surfaces. Take measures to prevent the build-up of electrostatic charge.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

In a tank or a store suitable for combustible liquids. Take precautionary measures to prevent product spills into drains, the ground, or waters. Take precautions against leakage by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations. Retail batches are stored in tightly sealed, labelled containers which are impermeable to the product. Store in accordance with local regulations.

Keep in properly labelled containers. Recommended materials for containers or container linings: carbon steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use.

7.3 SPECIFIC END USE(S)

Not known.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Workplace exposure limits
Source: EH40/2005, 3rd Ed., 2018.
None assigned.

Other exposure limits
Source: American Conference of Governmental Industrial Hygienists (ACGIH), Supplier's recommendations

Substance	Type	LTEL (8 hr TWA)		STEL (15 min)		Comments
		ppm	mg/m ³	ppm	mg/m ³	
Fuels, diesel	ACGIH	-	100	-	-	Can be absorbed through the skin.



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Biological Exposure Index (BEI): No biological limit allocated.

DNELs (Workers)

Hazard via inhalation route: 147 mg/m³ (Long-term exposure, systemic effects)

Hazard via dermal route: 42 mg/kg bw /day (Long-term exposure, systemic effects)

DNELs (Consumers)

Hazard via inhalation route: 94 mg/m³ (Long-term exposure, systemic effects)

Hazard via dermal route: 18 mg/kg bw /day (Long-term exposure, systemic effects)

PNEC related information:

PNEC derivation is not scientifically justified based on water solubility limitations.

8.2 EXPOSURE CONTROLS

8.2.1 Appropriate engineering controls

Handle the product in closed systems or provide sufficient ventilation. Wear protective equipment when needed. Handle in accordance with good industrial hygiene and safety practice.

8.2.2 Individual protection measures, such as personal protective equipment

Eye protection: Tight fitting safety goggles.

Skin protection: Protective clothing (antistatic), splash-proof chemical protective clothing when needed.

Hand protection: Protective gloves (e.g., of nitrile, neoprene, PVC). Breakthrough time >240, Protection class 5. Protective gloves according to standards EN 420 and EN 374. Change protective gloves regularly.

Respiratory protection: Oil mist: respirator (combined particle and organic vapour filter, type A2/P2). Filter device could be used maximum 2 hours at a time. Filter devices must not be used in conditions where the oxygen level is low (< 17 vol.-%). At high concentrations a breathing apparatus must be used (self-contained or fresh air hose breathing apparatus). Filter must be changed often enough. Respirators according to standards EN 140 and EN 141.

8.2.3 Environmental exposure controls:

Take precautions against leakage by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations



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9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid with low viscosity
Odour:	A mild characteristic odour
Odour threshold:	No data available.
pH:	Not applicable.
Melting/freezing point:	< -20°C @ 1013 hPa (BS4633, Method EC A1)
Initial boiling point and boiling range:	180 – 320 °C (EN ISO 3405)
Flash point:	> 61 °C @ 1013 hPa (EN ISO 2719, Method EC A9)
Evaporation rate:	No data available
Flammability (solid; gas):	Not applicable
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	0,087 kPa @ 25°C (Method EC A4)
Vapour density:	No data available
Relative density:	0,77 - 0,79 (15/20 °C; water= 1, EN ISO 12185, Method EC A3)
Solubility(ies):	Insoluble in water. ~ 0,075 mg/l water @ 25°C (calculated) Soluble in the following materials: Methanol. Hydrocarbons.
Partition coefficient: n-octanol/water:	Log Kow > 6,5 (Method EC A8)
Auto-ignition temperature:	204 °C (Method EC A15)
Decomposition temperature:	Not available.
Viscosity:	4.0 mm ² /s @ 20°C; 2.6 mm ² /s @ 40°C (OECD Guideline 114). Viscosity, dynamic ≤ 5 mPas @ 20°C.
Explosive properties:	Not explosive (Method EC A14)
Oxidising properties:	Not oxidising.

9.2 OTHER INFORMATION

No Data Available

SECTION 10. STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

The product is stable under normal use conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

No hazardous reactions expected during normal conditions.

10.4 CONDITIONS TO AVOID

Keep away from sources of ignition, hot surfaces, direct sunlight.

10.5 INCOMPATIBLE MATERIALS:



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Oxidising agents e.g. chlorates and ammonium nitrate which may be used in agriculture.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Note: All information in this section is for Fuels, diesel. Information given is based on product data, knowledge of the components and the toxicology of similar products.

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Oral Toxicity:	Very Low toxicity: LD50 > 2000 mg/kg, Rat
Acute Dermal Toxicity:	Very Low toxicity: LD50 =>2000 mg/kg, Rat
Corrosion/Irritation:	Not classified. (Method EC B4 and B5). Prolonged or repeated skin contact may irritate the skin and produce dermatitis. Oil mist may irritate the eyes and the respiratory tract. When ingested, product irritates the digestive tract.
Skin sensitisation	Not classified. Based on the available data the classification criteria are not met.
Toxicity:	In vitro tests did not show mutagenic effects (Method EC B10, B12, B13/14 and B17). No toxicity to reproduction (OECD 416).
Specific target organ toxicity – single exposure:	No known effect.
Specific target organ toxicity - repeated exposure:	No known effect. (OECD 408).
Aspiration hazard:	May be fatal if swallowed and enters airways. Risk of aspiration into lungs resulting in chemical pneumonia.

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY

Very low toxicity to aquatic life.

Acute aquatic toxicity:

fish: LL50/96h > 1000 mg/L, WAF (OECD 203).

crustacean: EL50/48h > 100 mg/L, WAF (OECD 202).

alga: EL50/72h > 100 mg/L, WAF (OECD 201).

Chronic aquatic toxicity:

crustacean: NOEC/21d > 1 mg/L, WAF; LOEC/21d = 3.2 mg/L, WAF (OECD 211).

sediment organisms: NOEC/10d = 373 mg/kg; LOEC/10d = 1165 mg/kg; LC50/10d = 1200 mg/kg (OSPAR Protocols, Part A: Sediment Bioassay, 2005).

Toxicity to other organisms

Micro-organisms (wastewater sludge): EC50/30min > 1000 mg/L; EC50/3h > 1000 mg/L (OECD 209).

12.2 PERSISTENCE/DEGRADABILITY:



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Readily degradable (OECD 301B). Does not hydrolyze in water.

12.3 BIOACCUMULATION POTENTIAL:

Possibly accumulative (log Kow > 6,5).

12.4 MOBILITY:

Product evaporates slowly from surface soil and water. It dissolves slightly in water. Hydrocarbons can be adsorbed onto organic material in soil or sediment. (log Koc > 5.6; Method EC C19).

12.5 PBT & vPvB ASSESSMENT:

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 OTHER ADVERSE EFFECTS:

None known.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

WASTE DISPOSAL

Product waste should be treated according to national regulations and local authorities' advice. When handling the waste note the hazards and take care of necessary safety measures, labelling and information.

PRODUCT DISPOSAL

Empty containers may contain combustible product residues Empty containers should be taken for local recycling or waste disposal.

SECTION 14. TRANSPORT INFORMATION

14.1 UN NUMBER

1202

14.2 UN PROPER SHIPPING NAME

DIESEL FUEL

14.3 TRANSPORT HAZARD CLASS(ES)

3

14.4 PACKING GROUP

III

14.5 ENVIRONMENTAL HAZARDS

ADN Special classification: F (floater).

14.6 SPECIAL PRECAUTIONS FOR THE USER

Hazard Identification Number 30 (ADR/RID)
Tunnel restriction code (D/E)

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE



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Transported by ship as bulk: Product name: Alkanes, C10-C26 linear and branched, (Flashpoint >60 deg.C)
(NExBTL Renewable Diesel), Category Y, ST3.

SECTION 15. REGULATORY INFORMATION

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

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP).

15.2 CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment has been carried out for this product.

SECTION 16. OTHER INFORMATION

HISTORY:

Version 01 ISSUED 05/08/2021, first release

REFERENCES:

Regulations, databases, literature, own research. Chemical Safety Report 2013.

ABBREVIATIONS:

CLP = Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

DSD = Council Directive (67/548/EEC) on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances

DPD = Directive 1999/45/EC of the European Parliament and of the Council concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging, and labelling of dangerous preparations

DNEL = Derived No-Effect Level

PNEC = Predicted No-Effect Concentration

WAF = Water Accommodated Fraction

SU = Sector of Use

PROC = Process Category

PC = Product Category

ERC = Environmental Release Category

FULL TEXT OF HAZARD STATEMENTS AND HAZARD CODES:

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

H304 May be fatal if swallowed and enters airways.

RECOMMENDED RESTRICTIONS

Distribution of substance (PROC 2, 3, 8a, 8b, 15; SU 8; ERC 1)

Formulation & (re)packing of substances and mixtures

(PROC 2, 3, 8a, 8b, 15; SU 10; ERC 2) and (PROC 1, 3, 8a, 8b, 9, 15; SU 10; ERC 7)

Use as a fuel:



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Industrial use (PROC 1, 2, 3, 8a, 8b, 15, 16; SU 3; ERC 7)

Professional use (PROC 1, 2, 8a, 8b, 16; SU 22; ERC 8B, 8E)

Consumers (PC 13; SU 21; ERC 8B, 8E)

Use as an intermediate (PROC 1, 2, 3, 4, 8a, 8b, 15; SU 8; ERC 6A)

DO NOT SIPHON DIESEL FUEL BY MOUTH SUCTION.

SDS DISTRIBUTION AND TRAINING

This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters. Workers should be trained to handle this substance safely.

FURTHER INFORMATION:

Users are advised to refer to relevant legislation, approved codes of practice and guidance available from the Health & Safety Executive (website: <http://www.hse.gov.uk>) and to the IP Codes of Practice available from the Energy Institute (website: <http://www.energyinst.org.uk>)

DISCLAIMER:

The above information is based on our current knowledge of the product. The purpose of this data sheet is to describe the product in terms of its safety and environmental requirements. It is the user's responsibility to satisfy themselves as to the application of this information and/or recommendations for their own use. This safety data sheet contains important information to ensure the safe storage, handling and use of this product, it does not however constitute an assessment of workplace risks. The advice given in this safety data sheet reflects the current knowledge of the hazards and risks associated with the handling of the product. If the product is mixed with other materials the users shall take these into account in identifying any additional hazards and risks might arise.