



Crossley House Industrial Estate, Leyland Road, Preston, PR1 9QP
Tel: 01772 619461 www.compassfuels.co.uk

HVO Renewable Diesel Safety Data

BS EN 15940 & ASTM D975 Diesel Fuel

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

1.1 PRODUCT IDENTIFIER

1.1.1 Commercial Product Name

HVO Renewable Diesel;

1.1.2 Product code

(ID 13898)

REACH Registration Number

01-2119450077-42-0000 / -0001 / -0002

Substance name Renewable hydrocarbons (diesel type fraction)

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

1.2.1 Recommended use

Use as a fuel

Distribution of substance

Formulation & (re)packing of substances and mixtures

Use as an intermediate

See the PROC/SU/ERC codes of the identified uses in Section 16.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

1.3.1 Supplier

Street address

Compass Fuel Oils Ltd, Crossley House Industrial Estate
Leyland Road, Penwortham, Lancashire, PR1 9QP

Telephone

01772 619461

Email

sales@compassfuel.co.uk

1.4 EMERGENCY TELEPHONE NUMBER

1.4.1 Telephone number, name and address 01772 619461

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

1272/2008 (CLP)

Asp. Tox. 1, H304

EUH066

67/548/EEC - 1999/45/EC

Xn; R65-66

2.2 LABEL ELEMENTS

1272/2008 (CLP)

GHS08

Signal word **Danger**



Hazard Statements

H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary Statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

P501 Dispose of contents/container according to national regulations and local authorities' advice.

2.3 OTHER HAZARDS

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS number	Chemical name of the substance	Concentration	Classification
	Renewable hydrocarbons (diesel type fraction)	Ca. 100 %	CLP: Asp. Tox. 1, H304 DSD-DPD: Xn; R65, R66

3.3 Other information

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.

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

4.1.2 Inhalation

Inhalation is unlikely because of the low vapour pressure of the substance at ambient temperature. If breathed in, move person into fresh air. Consult a physician.

4.1.3 Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

4.1.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

4.1.5 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).

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Aspiration into the lungs can cause fatal chemical pneumonitis.
Oil mist may irritate the eyes and the respiratory tract.
Prolonged or repeated contact causes drying and irritation of the skin.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Aspiration into the lungs can cause fatal chemical pneumonitis.

5. FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

5.1.1 Suitable extinguishing media

Dry powder, carbon dioxide. Sand. Heavy foam and water fog for professional fire-fighters.

5.1.2 Extinguishing media which must not be used for safety reasons

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 FIREFIGHTERS

Cool product containers and tanks near the fire with water spray from a sufficiently safe distance.

5.4 SPECIFIC METHODS

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing.

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 MATERIALS FOR CONTAINMENT AND CLEANING UP

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.

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)

None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

8.1.1 Threshold limits

Oil mist 5 mg/m³ (8 h)
HTP 2011/FIN

8.1.2 Other information on limit values

The occupational exposure monitoring method: Oil mist: NIOSH Method 5026, SFS-EN 689.

The individual limit values can be applied for the hydrocarbons.

8.1.4 DNELs

Workers:

Dermal: 42 mg/kg bw /day (Long-term exposure, systemic effects)

Inhalation: 147 mg/m³ (Long-term exposure, systemic effects)

Consumers:

Dermal: 18 mg/kg bw /day (Long-term exposure, systemic effects)

Inhalation: 94 mg/m³ (Long-term exposure, systemic effects)

8.1.5 PNECs

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

8.2.2.1 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.

8.2.2.2 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.

8.2.2.3 Eye/face protection

Tightly fitting safety goggles.

8.2.2.4 Skin protection

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

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

9.1.1 Appearance

Clear liquid with low viscosity.

9.1.2 Odour A mild characteristic odour.

9.1.3 Odour threshold no data available

9.1.4 pH no data available

9.1.5 Melting point/freezing point Melting point / Pour point < -20°C @ 1013 hPa (BS4633, Method EC A1)

9.1.6 Initial boiling point and boiling range 180 - 320°C (EN ISO 3405)

9.1.7 Flash point > 61 °C @ 1013 hPa (EN ISO 2719, Method EC A9)

9.1.8 Evaporation rate no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1.10 Explosive properties

9.1.10.1 Lower explosion limit no data available

9.1.10.2 Upper explosion limit no data available

9.1.11 Vapour pressure 0,087 kPa @ 25°C (Method EC A4)

9.1.12 Vapour density no data available

9.1.13 Relative density 0,77 - 0,79 (15/20 °C; water= 1, EN ISO 12185, Method EC A3)

9.1.14 Solubility(ies)

9.1.14.1 Water solubility Insoluble. (estimate: 0,075 mg/L @ 25 °C; (calculated))

9.1.14.2 Fat solubility (solvent /oil to be specified) Soluble (Methanol, hexane)

9.1.15 Partition coefficient: n-octanol/water Log Kow > 6,5 (Method EC A8)

9.1.16 Auto-ignition temperature 204 °C (Method EC A15)

9.1.17 Decomposition temperature no data available

9.1.18 Viscosity Kinematic viscosity 4.0 mm²/s @ 20°C; 2.6 mm²/s @ 40°C (OECD Guideline 114).

Viscosity, dynamic ≤ 5 mPas @ 20°C.

9.1.19 Explosive properties Not explosive (Method EC A14)

9.1.20 Oxidising properties Not oxidizing

10. STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Stable under recommended storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None known.

10.4 CONDITIONS TO AVOID

Keep away from fire, sparks and heated surfaces.

10.5 INCOMPATIBLE MATERIALS

Oxidizing agents

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No hazardous decomposition products are known.

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 Acute toxicity

Very low toxicity:

LD50/oral/rat > 2000 mg/kg (Method EC B1 tris)

LD50/dermal/rat = > 2000 mg/kg (Method EC B3)

11.1.2 Irritation and corrosion

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.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.3 Sensitisation Non-sensitizing (Method EC B6).

11.1.4 Subacute, subchronic and prolonged toxicity

In vitro tests did not show mutagenic effects (Method EC B10, B12, B13/14 and B17).

No toxicity to reproduction (OECD 416).

11.1.5 STOT-single exposure No known effect.

11.1.6 STOT-repeated exposure No known effect. (OECD 408).

11.1.7 Aspiration hazard

May be fatal if swallowed and enters airways. Aspiration of product into the lungs can cause fatal chemical pneumonitis.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY

12.1.1 Aquatic toxicity

Very low toxicity.

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).

12.1.2 Toxicity to other organisms

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

12.2 PERSISTENCE AND DEGRADABILITY

12.2.1 Biodegradation Readily degradable (OECD 301B).

12.2.2 Chemical degradation Does not hydrolyze in water.

12.3 BIOACCUMULATIVE POTENTIAL

Possibly accumulative (log Kow > 6,5).

12.4 MOBILITY IN SOIL

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 RESULTS OF PBT AND 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).

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

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.

13.2 WASTE FROM RESIDUES / UNUSED PRODUCTS

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

14. TRANSPORT INFORMATION

14.1 UN number 1202

14.2 UN proper shipping name UN 1202 Diesel fuel, 3, III

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 users – N/A

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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

15. REGULATORY INFORMATION

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

WGK = 1; Alkanes, C10-20 -branched and linear (Wassergefährdungsklasse, Germany)

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Updated according to regulation (EU) N:o 453/2010 amending regulation (EC) N:o 1907/2006 (REACH).

15.2 CHEMICAL SAFETY ASSESSMENT

A Chemical Safety Assessment has been carried out for this substance.

16. OTHER INFORMATION

16.1 ADDITIONS, DELETIONS, REVISIONS

Paragraph 1, 2, 11, 15, 16

16.2 KEY OR LEGEND TO ABBREVIATIONS AND ACRONYMS

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

16.3 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

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

16.5 LIST OF RELEVANT R & HAZARD STATEMENTS, AND/OR PRECAUTIONARY STATEMENTS

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.

16.7 RECOMMENDED RESTRICTIONS

Identified uses:

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:

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.