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#### SAFETY DATA SHEET

# Renewable diesel

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

# SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued 18.06.2021

#### 1.1. Product identifier

Product name Renewable diesel

UFI Y7G7-A4HD-Y40T-G4E4

Article no. HVO

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance / preparation Distribution of Substance

Formulation & (Re)packing

Use as a fuel

Use as an intermediate

Main intended use PC-FUE-1 Fuels for vehicles and machinery

Industrial use Yes

Professional use Yes

Consumer use Yes

#### 1.3. Details of the supplier of the safety data sheet

Company name North European Oil Trade

Office address Urho Kekkosen katu 5C, 00100 Helsinki

Postal address P.O. Box 55

Postcode 00088 S-RYHMÄ

City Helsinki

Country Finland

Telephone number +358 10 402 7001

Email tuotelaatu@neot.fi

Website www.neot.fi/en

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Enterprise No. FI18010565

#### 1.4. Emergency telephone number

Emergency telephone Telephone number: 112

Description: General emergency telephone number

Telephone number: +358 800 147 111 or +358 9 471 977

Description: Poison Information centre (in Finland), open 24 h daily

PL 340 (Haartmaninkatu 4)

00029 HUS

#### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Asp. Tox. 1; H304

EUH 066

#### 2 2 Labol alamants

# **Hazard pictograms (CLP)**



[CLP / GHS]

Composition on the label Renewable hydrocarbons (diesel type fraction)

Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.

EUH 066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor / .

P331 Do NOT induce vomiting.

#### 2.3. Other hazards

PBT / vPvB For results of PBT and vPvB assessment, see point 12.5.

Physicochemical effects Combustible liquid.

Environmental effects Risk of soil and groundwater contamination.

Other hazards Endocrine disrupting properties: No information.

# SECTION 3: Composition / information on ingredients

#### 3.2. Mixtures

Substance Identification Classification Contents Notes

Renewable hydrocarbons EC No.: 618-882-6 Asp. tox. 1; H304; ~ 100 %

(diesel type fraction) REACH Reg. No.: EUH 066;

01-2119450077-42-XXXX

Description of the mixture Mixture of renewable raw material fuel and additives. Contains middle

distillate-range iso- and n-paraffinic hydrocarbons. Total aromatics at maximum

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1,0 Weight %.

Substance comments

Renewable hydrocarbons (diesel type fraction, EC-no: 618-882-6): Identity outside the EU (CAS-number and name of the ingredient): Alkanes, C10-20, branched and linear, CAS 928771-01-1.

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation Unlikely to be hazardous by inhalation because of the low vapour pressure of the

product at ambient temperature. If product has been inhaled, remove victim to

fresh air and obtain medical attention.

Skin contact Remove contaminated clothing. Wash splashes off with plenty of water and

soap. Contact physician if irritation persists.

Eye contact Rinse immediately with plenty of water, also under the eyelids. Continue irrigation

for at least 15 minutes. If irritation, blurred vision or other symptoms persist,

consult a physician (risk of corneal injury).

Ingestion DO NOT INDUCE VOMITING. If vomiting occurs, help to keep the victim's head

down so that aspiration into the lungs will not occur. Obtain medical assistance immediately (risk of aspiration into the lungs and fatal chemical pneumonia

especially if nausea or irritation occurs).

#### 4.2. Most important symptoms and effects, both acute and delayed

General symptoms and effects

Product may irritate respiratory organs and cause fatal chemical pneumonia. Oil mist may irritate eyes and respiratory tract. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment

Treat symptomatically.

# SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media

Dry chemical powder or carbon dioxide. Foam. Water mist.

Improper extinguishing media

Powerful water jet.

#### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards

Combustible liquid. Explosion risk due to pressure increase if product containers or tanks are subjected to fire. The product floats and can be reignited to burn on

water surface.

Hazardous combustion products

Carbon monoxide (CO). Carbon dioxide (CO2).

#### 5.3. Advice for firefighters

Personal protective equipment

Wear appropriate protective equipment and self-contained breathing apparatus.

Fire fighting procedures

Cool product containers and tanks near the fire with water spray from a

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sufficiently safe distance. Prevent entry of extinguishing media into waterways.

#### SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures Eliminate all ignition sources if safe to do so.

Personal protection measures Avoid skin contact and oil mist aspiration.

Protective equipment Use appropriate personal protection equipment.

For emergency responders Ensure adequate ventilation, especially indoors. Keep unauthorised personnel

from entering the danger zone.

Remove all ignition sources. Take precautionary measures to avoid electrostatic

discharges. Ensure grounding of electrical equipment.

#### 6.2. Environmental precautions

Environmental precautionary measures

Stop the leak if it can be done safely. Aim to prevent spreading of the product and extinguishing media into the environment. Liquid product must be contained before it contaminates sewers, soil and waterways. Immediately notify the local authorities about any damage. Risk of soil and groundwater contamination.

### 6.3. Methods and material for containment and cleaning up

Containment If possible, extensive leaks into water bodies should be limited by floating booms

or other mechanical means.

Clean up Immediately start clean-up of the liquid product and contaminated soil. Collect

the liquid leak by pumping or adsorb small volumes with inert materials (e.g. sand, diatomaceous earth, commercial absorbent). Collect inert materials in

suitable labeled containers and close them tightly for disposal.

Other information Pay attention to the fire and health hazards caused by the product.

#### 6.4. Reference to other sections

Other instructions Safe handling: see Section 7.

Personal protective equipment: see Section 8.

Disposal: see Section 13.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Protective safety measures

Protective safety measures

Handle and store away from all sources of heat or ignition. Take precautionary measures (grounding) against static discharges. Concentrations in air must be

kept below any lower explosive limits.

Only use in closed systems or ensure adequate ventilation (use process

enclosures or local exhaust ventilation if necessary).

During tank operations follow special instructions (risk of oxygen displacement).

Advice on general occupational

hygiene

Avoid inhalation of vapours and contact with skin, eyes or clothing. Wash hands after handling. Eating, drinking, and smoking are prohibited while handling the

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product. If required, use personal protective equipment.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage Store in accordance with local regula

Store in accordance with local regulations. Store in containers and areas suitable for the storage of combustible liquids. Small product batches are stored in tightly

sealed containers impermeable to hydrocarbons.

Recommended container materials or coatings: carbon steel, stainless steel.

Use appropriate protective structures, such as collecting pools, loading/
unloading station surfacing and sewerage systems to prevent leakage into the

environment.

Conditions to avoid For incompatible materials see point 10.5.

## Conditions for safe storage

Requirements for storage rooms and vessels

Do not store in unmarked containers or vessels. Store away from all sources of heat or ignition and food and drink.

#### 7.3. Specific end use(s)

Specific use(s) None reported.

# SECTION 8: Exposure controls / personal protectior

#### 8.1. Control parameters

Substance Identification Exposure limits TWA Year

Renewable hydrocarbons (diesel type fraction)

Oil mist CAS No.: 8012-95-1 Limit value (8 h): 5 mg/m<sup>3</sup>

Diesel fuel as total hydrocarbons; ACGIH TLV®-TWA (8h) 100 mg/m3 (IFV).

#### DNFL / PNFC

DNEL

PNEC Comments: Not determined (poorly soluble in water)

Substance Renewable hydrocarbons (diesel type fraction)

Route of exposure: Long-term inhalation (systemic)

Value: 147 mg/m<sup>3</sup> Reference: Day.

**Group:** Professional

**Group:** Professional

Route of exposure: Long-term dermal (systemic)

Value: 42 mg/kg bw/day

Group: Consumer

Route of exposure: Long-term inhalation (systemic)

Value: 94 mg/m<sup>3</sup>

Group: Consumer

Route of exposure: Long-term dermal (systemic)

Value: 18 mg/kg bw/day

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#### 8.2. Exposure controls

# Precautionary measures to prevent exposure

Technical measures to prevent exposure

Handle the product in closed systems. Ensure adequate ventilation. Use process enclosures or local exhaust ventilation and personal protection if necessary. Handle with proper personal and process safety. In confined space works use special controls (risk of low oxygen level and hydrocarbons).

#### Eye / face protection

Required Properties

Use tight-fitting safety goggles if splashing may occur or aerosol is formed.

#### Hand protection

Suitable gloves type

Wear appropriate chemical-resistant, impervious protective gloves. Standards EN 420 and EN 374.

Suitable materials

Nitrile. Neoprene. Polyvinyl chloride (PVC).

Breakthrough time

Value: > 240 minute(s)

Hand protection, comments

Change protective gloves regularly in order to avoid penetration problems.

#### Skin protection

Suitable protective clothing

Wear appropriate antistatic protective clothing. If splashing may occur, use chemical-resistant gloves, footwear and apron.

#### Respiratory protection

Recommended type of equipment

Wear a respirator or half mask. It is recommended to use respiratory equipment with combination filter, type A2/P2. Use respiratory protection according to EN 140 and EN 141.

Respiratory protection, comments

The use of filter devices should be limited to max. 2 hrs per day. Filter devices must not be used when oxygen levels are low (< 19 vol.-%). If significant amounts of mist or vapour form, use supplied-air respirator (compressed-air or fresh-air breathing apparatus). The filter must be changed frequently enough.

#### Appropriate environmental exposure contro

Environmental exposure controls

Prevent product entry into sewers or the environment. Precautions must be taken against leakages by constructing collecting pools and sewerage systems as well as by surfacing the loading and unloading stations.

# SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state Liquid

Colour Clear

Odour Mild scent of hydrocarbons

Odour limit Comments: Unknown

pH Comments: Unknown

Melting point / melting range Value: < -20 °C

Method: BS4633, EC A1 Comments: Pour point

@ 1013 hPa

Boiling point / boiling range Value: 180 -320 °C

Method: EN ISO 3405

Flash point Value: > 61 °C

Method: EN ISO 2719, EC A9

Evaporation rate Comments: Unknown

Flammability Unknown

Lower explosion limit with unit of

measurement

Comments: Unknown

Upper explosion limit with units of

measurement

Comments: Unknown

Vapour pressure Value: 0,087 kPa

Method: EC A4 Temperature: 25 °C

Vapour density Comments: Unknown

Relative density Value: 0,77 – 0,79

Method: EN ISO 12185, EC A3

Comments: Water = 1

Solubility Medium: Water

Value: ~ 0,075 mg/l Method: Calculated

Comments: Insoluble in water

Temperature: 25 °C

Comments: Soluble in: Methanol. Hydrocarbons.

Partition coefficient: n-octanol/

water

Method: EC A8

Comments: log Kow: > 6,5

Auto-ignition temperature Value: 204 °C

Method: EC A15

Decomposition temperature Comments: Unknown

Viscosity Value: 4.0 mm2/s

Method: OECD 114 Temperature: 20 °C Type: Kinematic

Value: 2.6 mm2/s Method: OECD 114 Temperature: 40 °C Type: Kinematic

Value: ≤ 5 mPa.s Temperature: 20 °C Type: Dynamic Renewable diesel - Version 1 Page 8 of 13

Explosive properties Not classified as explosive

Oxidising properties Not classified as oxidising

#### 9.2. Other information

#### 9.2.2. Other safety characteristics

Comments Data lacking.

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reactivity No hazardous reactions known under normal use and storage conditions.

#### 10.2. Chemical stability

Stability Chemically stable under normal storage conditions.

#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known under normal use conditions.

#### 10.4. Conditions to avoid

Conditions to avoid Keep away from heat sources, fire, sparks and other ignition sources.

#### 10.5. Incompatible materials

Materials to avoid Oxidizing agents.

#### 10.6. Hazardous decomposition products

Hazardous decomposition

products

No hazardous decomposition products known.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Substance Renewable hydrocarbons (diesel type fraction)

Acute toxicity Effect tested: LD50

Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Rat Test reference: EC B1 tris

Effect tested: LD50

Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rat Test reference: EC B3

Other toxicological data

The product has not been classified as acutely toxic.

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Assessment of skin corrosion / irritation, classification

Non Corrosive to skin. Not Irritating. (EC B4) Prolonged or repeated contact leads

to drying of skin.

Assessment of eye damage or irritation, classification

Not Irritating. (EC B5)

Inhalation

Vapours and mist may irritate the respiratory tract.

Skin contact

Prolonged or repeated contact may cause skin irritation and drying.

Eve contact

Vapour and mist may irritate the eyes.

Sensitisation

The product is not classified as sensitizing. (EC B6)

Mutagenicity

No mutagenic effects were observed in in vitro studies (EC B10, B13/14, B17).

Assessment of carcinogenicity,

classification

The product is not classified as a carcinogen.

Reproductive toxicity

The product is not classified as a reproductive toxicant (OECD 416).

Assessment of specific target organ toxicity - single exposure,

The product is not classified as toxic to specific target organs in case of single exposure.

classification

Assessment of specific target organ toxicity - repeated exposure,

classification

No known effects (OECD 408).

Aspiration hazard, comments

The product may be fatal if swallowed and enters airways. May cause fatal chemical pneumonia, if product gets in lungs (aspiration).

In case of ingestion

The product causes irritation of mucous membranes and may cause abdominal

discomfort if swallowed.

**Endocrine disruption** 

No information.

Substance

Renewable hydrocarbons (diesel type fraction)

Aquatic toxicity, fish

Toxicity type: Acute Value: > 1000 mg/l

Effect dose concentration: LL50 **Exposure time:** 96 hour(s) Test reference: WAF (OECD 203)

Substance

Renewable hydrocarbons (diesel type fraction)

Aquatic toxicity, algae

Toxicity type: Acute **Value:** > 100 mg/l

Effect dose concentration: EL50 Exposure time: 72 hour(s) Test reference: WAF (OECD 201) Renewable diesel - Version 1 Page 10 of 13

Substance

Renewable hydrocarbons (diesel type fraction)

Aquatic toxicity, crustacean

Toxicity type: Acute Value: > 100 mg/l

Effect dose concentration: EL50 Exposure time: 48 hour(s) Test reference: WAF (OECD 202)

Toxicity type: Chronic

Value: 1 mg/l

Effect dose concentration: NOEC Exposure time: 21 day(s)
Test reference: WAF (OECD 211)

**Toxicity type:** Chronic **Value:** 3,2 mg/l

Effect dose concentration: LOEC Exposure time: 21 day(s)
Test reference: WAF (OECD 211)

Substance

Renewable hydrocarbons (diesel type fraction)

Toxicity to sediment living

organisms

**Toxicity type:** Chronic **Value:** 373 mg/kg

**Effect dose concentration:** NOEC **Exposure time:** 10 day(s)

Test reference: OSPAR Protocols, Part A: Sediment Bioassay, 2005

**Toxicity type:** Chronic **Value:** 1165 mg/kg

**Effect dose concentration:** LOEC **Exposure time:** 10 day(s)

Test reference: OSPAR Protocols, Part A: Sediment Bioassay, 2005

**Toxicity type:** Chronic **Value:** 1200 mg/kg

Effect dose concentration: LC50 Exposure time: 10 day(s)

Test reference: OSPAR Protocols, Part A: Sediment Bioassay, 2005

Substance

Renewable hydrocarbons (diesel type fraction)

Impact on sewage treatment

**Value:** > 1000 mg/l

Effect dose concentration: EC50 Exposure time: 30 minute(s) Test reference: OECD 209

Comments: Toxicity to micro-organisms (sludge).

**Value:** > 1000 mg/l

Effect dose concentration: EC50 Exposure time: 3 hour(s) Test reference: OECD 209

Comments: Toxicity to micro-organisms (sludge).

#### 12.2. Persistence and degradability

Persistence and degradability description/evaluation

No significant reaction in water.

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Biodegradability Method: OECD 301B

Comments: Quickly biodegradable.

#### 12.3. Bioaccumulative potential

Bioaccumulation, evaluation

Possibly bioaccumulative. log Kow: > 6,5 (EC A8)

#### 12.4. Mobility in soil

Mobility

The product evaporates slowly from water and soil surfaces. The product has poor water-solubility. The product contains substances which are bound to particulate matter and are retained in soil. Log Koc > 5.6 (EC C19)

#### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

# 12.6. Endocrine disrupting properties

Endocrine disrupting properties

No information.

#### 12.7. Other adverse effects

Additional ecological information

Not known.

# SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Appropriate methods of disposal for the chemical

Dispose of in accordance with the waste legislation and instructions given by environmental authorities. When handling waste, observe the hazards and take all necessary precautionary measures. Empty containers may contain flammable remnants of product. Dispose of empty containers for recovery, recycling or waste

# SECTION 14: Transport information

#### 14.1. UN number

ADR/RID/ADN 1202

IMDG 1202

ICAO/IATA 1202

Comments Bulk (MARPOL 73/78, Annex I): Energy-rich fuels

This cargo is considered an Energy-rich fuel and effective 1 January 2019 should be carried subject to Annex I of MARPOL, see Annex 12 of MEPC.2/Circ.24. Please also refer to MEPC.1/Circ.879 -GUIDELINES FOR THE CARRIAGE OF

**ENERGY-RICH FUELS AND THEIR BLENDS** 

#### 14.2. UN proper shipping name

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Proper shipping name English

ADR/RID/ADN

DIESEL FUEL

ADR/RID/ADN

DIESEL FUEL

IMDG

DIESEL FUEL

ICAO/IATA

DIESEL FUEL

#### 14.3. Transport hazard class(es)

ADR/RID/ADN 3

Classification code ADR/RID/ADN F1

IMDG 3

ICAO/IATA 3

# 14.4. Packing group

ADR/RID/ADN III

IMDG III

ICAO/IATA III

#### 14.5. Environmental hazards

IMDG Marine pollutant

No.

#### 14.6. Special precautions for user

#### 14.7. Maritime transport in bulk according to IMO instruments

Product name DIESEL FUEL

Ship type required 2

Pollution category X

#### Additional information

Hazard label ADR/RID/ADN 3

Hazard label IMDG 3

Hazard label ICAO/IATA 3

#### ADR/RID Other information

Tunnel restriction code D/E

Transport category 3

Hazard No. 30

Other applicable information ADR/

RID

30

#### IMDG Other information

EmS

F-E, S-E

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# SECTION 15: Regulatory information

# 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Legislation and regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

### 15.2. Chemical safety assessment

Chemical safety assessment performed

Yes

### **SECTION 16: Other information**

List of relevant H-phrases (Section 2 and 3)

EUH 066 Repeated exposure may cause skin dryness or cracking. H304 May be fatal if swallowed and enters airways.

Recommended restrictions on use

Identified uses, list of Exposure scenarios:

- 1. Distribution of substance Industrial
- 2. Formulation and (re-)packing Industrial
- 3. Use as a fuel Industrial, Professional, Consumer
- 4. Use as an intermediate Industrial

DO NOT TRY TO SUCK DIESEL OIL USING YOUR MOUTH.

Additional information

Neot Oy, Tuotelaatu, +358 10 402 7001, tuotelaatu@neot.fi

Key literature references and sources for data

ECHA, Registered Substances database

Decree on Concentrations known to be Hazardous 654/2020 (HTP-arvot 2020),

Finland

SDS by product manufacturer (01/10/2019)

Abbreviations and acronyms used

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.

OEL (HTP): Occupational exposure limit, concentrations known to be hazardous

**DNEL: Derived No-Effect Level** 

EL50: Effective level 50 % (median effective level): loading rate of the substance which kills or immobilizes 50 % of exposed organisms

IL50: Inhibitory level: concentration that inhibits a biological function by 50%.

LD50: Lethal dose: dose that kills 50% of exposed organisms. LL50: Lethal level: loading rate that kills 50% of exposed organisms.

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Exposure scenario

The state of the s