BIOFUEL EXPRESS

Säkerhetsdatablad

Neste My Förnybar Diesel

Ersätter datum: 26/07/2022
Revisionsdatum: 02/02/2023

SAFETY DATA SHEET
Neste Renewable Diesel; Neste Renewable Diesel 100 %; Neste MY Renewable Diesel

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

1.1. Product identifier

Product name	Neste Renewable Diesel; Neste Renewable Diesel 100 %; Neste MY Renewable Diesel
Chemical name	Renewable hydrocarbons (diesel type fraction)
Product number	ID 13898
UFI	UFI: SDGM-514C-9915-FWKJ
EU REACH registration number	01-2119450077-42-0000
EU REACH registration notes	01-2119450077-42-0000 / -0001 / -0002

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

Identified uses	Formulation & (re)packing of substances and mixtures (ES 02) Distribution of substance (ES 04) Use as an intermediate (ES 05) Use as a fuel (ES 06, 14, 23)

1.3. Details of the supplier of the safety data sheet

Supplier	Biofuel Express A/S Alsvej 21, 8940 Randers SV, Denmark Tel. +45 70 26 41 22 mail@biofuel-express.com

1.4. Emergency telephone number

Emergency telephone	+61 2 9186 1132, Chemwatch: International Emergency Response Phone Number
National emergency telephone number	+358 800 147 111, +358 9 471 977, Poison Information Centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Asp. Tox. 1 - H304
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms

Signal word Danger

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Hazard statements	H304 May be fatal if swallowed and enters airways.
Precautionary statements	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
Contains	Renewable hydrocarbons (diesel type fraction)

2.3. Other hazards

Other hazards	Combustible liquid. Risk of soil and ground water contamination. This product does not contain substances considered to have endocrine disrupting properties at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Renewable hydrocarbons (diesel type fraction) CAS number: —	**ca. 100%**
Classification Asp. Tox. 1 - H304	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Other information	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):, REACH Nr: 01-2119450077-42-0000 / -0001 / -0002., Identity outside the EU (CAS number and name of the substance):, 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 spray/mist has been inhaled, proceed as follows. Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.
Ingestion	Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

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

General information	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

Notes for the doctor	Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media Water may be ineffective for extinguishment, unless used under favorable conditions by experienced fire fighters

5.2. Special hazards arising from the substance or mixture

Specific hazards Combustible liquid. Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Carbon dioxide (CO2). Carbon monoxide (CO).

5.3. Advice for firefighters

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

Special protective equipment for firefighters 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

Personal precautions Wear adequate protective equipment at all operations.

For emergency responders Prevent unauthorized access. Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharge.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Stop leak if safe to do so. Avoid the spillage or runoff entering drains, sewers or watercourses. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air). Risk of soil and ground water contamination.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Immediately start clean-up of the liquid and contaminated soil. Contain spillage with sand, earth or other suitable non-combustible material. Pay attention to the fire and health hazards caused by the product.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. Use only outdoors or in a well-ventilated area. Avoid inhalation of vapours and contact with skin and eyes. Use personal protective equipment and/or local ventilation when needed. Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Flammable liquid storage. Store in accordance with local regulations. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Only store in correctly labelled containers. Use containers made of the following materials: Carbon steel. Stainless steel.

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7.3. Specific end use(s)

Specific end use(s) Not known.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments The individual limit values can be applied for the hydrocarbons. Diesel fuel as total hydrocarbons; ACGIH TLV®-TWA (8h) 100 mg/m3 (IFV).

PNEC Not available.

Renewable hydrocarbons (diesel type fraction)

DNEL

Workers - Inhalation; Long term systemic effects: 147 mg/m³
Workers - Dermal; Long term systemic effects: 42 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 94 mg/m³
Consumer - Dermal; Long term systemic effects: 18 mg/kg/day

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Use personal protective equipment and/or local ventilation when needed. Handle in accordance with good industrial hygiene and safety practice. During tank operations follow special instructions (risk of oxygen displacement and hydrocarbons).

Eye/face protection Spectacles.

Hand protection Wear protective gloves. It is recommended that gloves are made of the following material: Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). The breakthrough time for any glove material may be different for different glove manufacturers. Protective gloves according to standard EN 374. Change protective gloves regularly.

Other skin and body protection Protective clothing when needed. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

Respiratory protection Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2. Filter must be changed often enough. Gas and combination filter cartridges suitable for intended use should be used. At high concentrations a breathing apparatus must be used (self-contained or fresh air hose breathing apparatus).

Environmental exposure controls Store in a demarcated bunded area to prevent release to drains and/or watercourses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Clear.

Odour Mild.

Odour threshold -

pH -

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

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

Flash point > 61°C (EN ISO 2719, EC A9)

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Upper/lower flammability or explosive limits	-
Vapour pressure	0,087 kPa @ 25°C (EC A4)
Vapour density	-
Relative density	0,77 - 0,79 @ 15/4°C (EN ISO 12185, EC A3)
Solubility(ies)	Insoluble in water. ~ 0,075 mg/l water @ 25°C (calculated) Soluble in the following materials: Methanol. Hydrocarbons.
Partition coefficient	log Kow: > 6,5 (EC A8)
Auto-ignition temperature	204°C (EC A15)
Decomposition Temperature	-
Viscosity	Kinematic viscosity 4.0 mm2/s @ 20°C 2.6 mm2/s @ 40°C (OECD 114) Dynamic viscosity ≤ 5 mPa s @ 20°C
Explosive properties	Not considered to be explosive. (EC A14)
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid	Keep away from heat, sparks and open flame.

10.5. Incompatible materials

Materials to avoid	Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation	Based on available data the classification criteria are not met. (EC B4) Repeated exposure may cause skin dryness or cracking. The product irritates mucous membranes and may cause abdominal discomfort if swallowed. May cause respiratory system irritation.

Serious eye damage/irritation

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Serious eye damage/irritation Based on available data the classification criteria are not met. (EC B5)

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met. (EC B6)

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met. (EC B10, B13/14 & B17).

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. (OECD 416)

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met. (OECD 408)

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

General information This product does not contain substances considered to have endocrine disrupting properties at levels of 0.1% or higher.

Toxicological information on ingredients.

Renewable hydrocarbons (diesel type fraction)

Acute toxicity - oral

Notes (oral LD_{50}) LD_{50} >2000 mg/kg, Oral, Rat (EC B1 tris)

Acute toxicity - dermal

Notes (dermal LD_{50}) LD_{50} > 2000 mg/kg, Dermal, Rat (EC B3)

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

Ecological information on ingredients.

Renewable hydrocarbons (diesel type fraction)

Acute aquatic toxicity

Acute toxicity - fish LL_{50}, 96 hours: > 1000 mg/l, WAF (OECD 203)

Acute toxicity - aquatic invertebrates EL50, 48 hours: > 100 mg/l, WAF (OECD 202)

Acute toxicity - aquatic plants EL50, 72 hours: > 100 mg/l, Algae WAF (OECD 201)

Acute toxicity - microorganisms EC_{50}, 30-180 minutes: > 1000 mg/l, Micro-organisms (wastewater sludge) (OECD 209)

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Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 1 mg/l, LOEC, 21 days: 3,2 mg/l, WAF (OECD 211) Sediment organisms NOEC, 10 days: 373 mg/kg, LOEC, 10 days: 1165 mg/kg, LC_{50}, 10 days: 1200 mg/kg, (OSPAR Protocols, Part A: Sediment Bioassay, 2005)

12.2. Persistence and degradability

Stability (hydrolysis)	No significant reaction in water.
Biodegradation	Rapidly degradable (OECD 301B).

Ecological information on ingredients.

Renewable hydrocarbons (diesel type fraction)

Biodegradation	Rapidly degradable (OECD 301B).

12.3. Bioaccumulative potential

Bioaccumulative potential	Possibly bioaccumulative.
Partition coefficient	log Kow: > 6,5 (EC A8)

12.4. Mobility in soil

Mobility	Evaporates slowly. 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 substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects	Not known.
Endocrine-disrupting properties	This product does not contain substances considered to have endocrine disrupting properties at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Product residues retained in emptied containers can be hazardous. Waste packaging should be collected for reuse or recycling.

SECTION 14: Transport information

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Sea transport notes 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

14.1. UN number

UN No. (ADR/RID) 1202

UN No. (IMDG) Not classified under IMDG.

14.2. UN proper shipping name

Proper shipping name (ADR/RID) UN 1202 DIESEL FUEL

14.3. Transport hazard class(es)

ADR/RID class 3

ADN subsidiary risk F (floater)

14.4. Packing group

ADR/RID packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations UK REACH Registration number: UK-01-9638319484-0-XXXX.
Only Representative UK: Penman Consulting Limited 41, Aspect House, Waylands Avenue, Grove Business Park, Wantage, Oxon, OX12 9FF, United Kingdom; Telephone: 01367 718474, Email: pcltd41@penmanconsulting.com.
Location of manufacture: Neste Rotterdam Refinery, the Netherlands.
EU regulatory references for the safety data sheet:
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) (as amended)
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended)

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

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SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	DNEL = Derived No-Effect Level PNEC = Predicted No-Effect Concentration WAF = Water Accommodated Fraction
Key literature references and sources for data	Regulations, databases, literature, own research. Chemical Safety Report Renewable hydrocarbons (diesel type fraction), 2017.
Revision comments	Updated, sections: 1, 2, 11, 12 NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	02/02/2023
Supersedes date	26/07/2022
SDS number	5359
Hazard statements in full	H304 May be fatal if swallowed and enters airways.

Exposure scenario
Distribution of Substance - Industrial

Identification

Product name	Renewable hydrocarbons (diesel type fraction)
EU REACH registration number	01-2119450077-42-XXXX
Version number	2017
Es reference	04

1. Title of exposure scenario

Main title	Distribution of Substance - Industrial
Process scope	Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities.
Main sector	SU3 Industrial uses

Environment

Environmental release category	ERC7 Use of functional fluid at industrial site
SPERC	ESVOC SPERC 1.1b.v1

Worker

Process category	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 1
Daily amount per site: ≤ 5000 t
Annual amount per site: ≤ 1 500 000 t

Frequency and duration of use

Emission days: 300 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air	0,001%
Emission factor - water	4E-7%.
Emission factor - soil	0,001%

Environmental factors not influenced by risk management measures

Distribution of Substance - Industrial

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Risk management measures

STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Waste treatment	Dispose of waste in accordance with environmental legislation.

Conditions and measures related to external recovery of waste

Recovery method	All waste product is assumed to be collected and returned for re-processing or use as a fuel.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Human factors not influenced by risk management

Potentially exposed body parts	PROC 3, PROC 15: Covers skin contact area up to 240 cm². Palm of one hand. PROC 2, PROC 9: Covers skin contact area up to 480 cm². Palm of both hands. PROC 8a, 8b: Covers skin contact area up to 960 cm². Both hands.

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	≤ 40°C
Ventilation rate	1 -3 air changes per hour Unless otherwise stated. Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Distribution of Substance - Industrial

General exposures (closed systems)
With occasional controlled exposure
(PROC 3)
No specific measures identified.

Process sampling
(PROC 3)
Wear suitable gloves tested to EN374.

Laboratory activities
(PROC 15)
Provide adequate general and local exhaust ventilation.
Wear suitable gloves tested to EN374.
Recommendation:
Handle in a fume cupboard or under extract ventilation.

Bulk transfers
Road tanker/rail car loading.
(closed systems)
(PROC 8b)
Recommendation:
Use vapour recovery units when necessary.
Wear suitable gloves tested to EN374.

Bulk transfers
Marine vessel/barge (un)loading.
(closed systems)
(PROC 8b)
Recommendation:
Wear suitable gloves tested to EN374.

Equipment cleaning and maintenance
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.

Storage
With occasional controlled exposure
(PROC 2)
No specific measures identified.

Drum and small package filling
(PROC 9)
Recommendation:
Wear suitable gloves tested to EN374.

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Exposure scenario
Formulation & (re)packing - Industrial

Identification

Product name Renewable hydrocarbons (diesel type fraction)

EU REACH registration number 01-2119450077-42-XXXX

Version number 2017

Es reference 02

1. Title of exposure scenario

Main title Formulation & (re)packing - Industrial

Process scope Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.

Main sector SU3 Industrial uses

Environment

Environmental release category ERC2 Formulation into mixture

SPERC ESVOC SPERC 2.2.v1

Worker

Process category PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC5 Mixing or blending in batch processes
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 1
Daily amount per site: ≤ 100 t
Annual amount per site: ≤ 1 500 000 t

Frequency and duration of use

Emission days: 300 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air 0,25%

Formulation & (re)packing - Industrial

Emission factor - water	0,005%
Emission factor - soil	0.01%

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Risk management measures

STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Disposal method	Dispose of waste in accordance with environmental legislation.

Conditions and measures related to external recovery of waste

Recovery method	All waste product is assumed to be collected and returned for re-processing or use as a fuel.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Human factors not influenced by risk management

Potentially exposed body parts	PROC 1, PROC 3, PROC 15: Covers skin contact area up to 240 cm². Palm of one hand. PROC 2, PROC 5, PROC 9: Covers skin contact area up to 480 cm². Palm of both hands. PROC 8a, 8b: Covers skin contact area up to 960 cm². Both hands.

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	≤ 40 °C
Ventilation rate	1 - 3 air changes per hour Unless otherwise stated. Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Formulation & (re)packing - Industrial

Mixing operations
(PROC 3)
No specific measures identified.

Batch processes at elevated temperatures
(PROC 3)
No specific measures identified.

Process sampling
(PROC 3)
Wear suitable gloves tested to EN374.

Laboratory activities
(PROC 15)
Provide adequate general and local exhaust ventilation.
Wear suitable gloves tested to EN374.
Recommendation:
Handle in a fume cupboard or under extract ventilation.

Bulk transfers
(PROC 8b)
No specific measures identified.

Mixing operations
(open systems)
With potential for aerosol generation
(PROC 5)
Recommendation:
Wear suitable gloves tested to EN374.

Transfer from/pouring from containers
Manual
(PROC 8a)
Wear suitable gloves tested to EN374.

Drum/batch transfers
(PROC 8b)
No specific measures identified.

Drum and small package filling
(PROC 9)
Provide adequate general and local exhaust ventilation.
Recommendation:
Fill containers/cans at dedicated fill points supplied with local extract ventilation.

Equipment cleaning and maintenance
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.

Storage
(PROC 1, PROC 2)
No specific measures identified.

Formulation & (re)packing - Industrial

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Exposure scenario
Use as a fuel - Industrial

Identification

Product name	Renewable hydrocarbons (diesel type fraction)
EU REACH registration number	01-2119450077-42-XXXX
Version number	2017
Es reference	06

1. Title of exposure scenario

Main title	Use as a fuel - Industrial
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU3 Industrial uses

Environment

Environmental release category	ERC7 Use of functional fluid at industrial site
SPERC	ESVOC SPERC 7.12a.v1

Worker

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC15 Use as laboratory reagent. PROC16 Use of fuels

2. Conditions of use affecting exposure (Industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 1
Daily amount per site: ≤ 5000 t
Annual amount per site: ≤ 10 000 t

Frequency and duration of use

Emission days: 300 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air	0.025%
Emission factor - water	0,001%
Emission factor - soil	0%

Use as a fuel - Industrial

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Risk management measures

STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Disposal method	Dispose of waste in accordance with environmental legislation.

Conditions and measures related to external recovery of waste

Recovery method	Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Human factors not influenced by risk management

Potentially exposed body parts	PROC 1, PROC 3, PROC 15, PROC 16: Covers skin contact area up to 240 cm². Palm of one hand. PROC 2, PROC 4: Covers skin contact area up to 480 cm². Palm of both hands. PROC 8a, 8b: Covers skin contact area up to 960 cm². Both hands.

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	≤ 40 °C
Ventilation rate	1 - 3 air changes per hour Unless otherwise stated. Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use as a fuel - Industrial

Bulk transfers
(PROC 4)
Recommendation:
Wear suitable gloves tested to EN374.

Drum/batch transfers
(PROC 8b)
Provide adequate general and local exhaust ventilation.
Recommendation:
Use drum pumps or carefully pour from container.
Wear suitable gloves tested to EN374.

Bulk transfers
(PROC 8b)
Recommendation:
Use drum pumps or carefully pour from container.
Wear suitable gloves tested to EN374.

General exposures (closed systems)
Continuous process
(PROC 1)
No specific measures identified.

General exposures (closed systems)
Continuous process
With sample collection
(PROC 2)
Recommendation:
Ensure material transfers are under containment or extract ventilation.

General exposures (closed systems)
Batch process
(PROC 3)
Recommendation:
Ensure material transfers are under containment or extract ventilation.

General exposures (open systems)
(PROC 16)
Recommendation:
Ensure material transfers are under containment or extract ventilation.

Process sampling
(PROC 3)
Recommendation:
Wear suitable gloves tested to EN374.

Equipment cleaning and maintenance
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.

Vessel and container cleaning
(PROC 8a)

Use as a fuel - Industrial

Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Provide enhanced general ventilation by mechanical means.
If above technical/organisational control measures are not feasible, then adopt following PPE:
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Wear suitable gloves tested to EN374.
Wear suitable coveralls to prevent exposure to the skin.

Storage
(PROC 1, PROC 2)
No specific measures identified.

Refuelling
(PROC 8b)
Recommendation:
Use drum pumps or carefully pour from container.
Use vapour recovery units when necessary.
Wear suitable gloves tested to EN374.

Laboratory activities
(PROC 15)
Recommendation:
Handle in a fume cupboard or under extract ventilation.
Wear suitable gloves (tested to EN374), coverall and eye protection.

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Exposure scenario
Use as a fuel - Professional

Identification

Product name	Renewable hydrocarbons (diesel type fraction)
EU REACH registration number	01-2119450077-42-XXXX
Version number	2017
Es reference	14

1. Title of exposure scenario

Main title	Use as a fuel - Professional
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Main sector	SU22 Professional uses

Environment

Environmental release category	ERC9a Widespread use of functional fluid (indoor) ERC9b Widespread use of functional fluid (outdoor)
SPERC	ESVOC SPERC 9.12b.v1

Worker

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC16 Use of fuels

2. Conditions of use affecting exposure (Industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 0.1
Daily amount per site: ≤ 160 kg

Frequency and duration of use

Emission days: 365 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air	0,01 %
Emission factor - water	0,001 %
Emission factor - soil	0,001 %

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Use as a fuel - Professional

Risk management measures

STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Disposal method	Dispose of waste in accordance with environmental legislation.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Human factors not influenced by risk management

Potentially exposed body parts	PROC 1, PROC 3, PROC 16: Covers skin contact area up to 240 cm². Palm of one hand. PROC 2: Covers skin contact area up to 480 cm². Palm of both hands. PROC 8a, 8b: Covers skin contact area up to 960 cm². Both hands.

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	≤ 40 °C
Ventilation rate	1 - 3 air changes per hour Unless otherwise stated.

Risk management measures

Use as a fuel - Professional

Bulk transfers
Heating oil and diesel deliveries
(PROC 8b)
Provide adequate general and local exhaust ventilation.
Recommendation:
Handle substance within a closed system.
Wear suitable gloves tested to EN374.
.
Drum/batch transfers
(PROC 8b)
Provide adequate general and local exhaust ventilation.
Recommendation:
Use drum pumps or carefully pour from container.
Wear suitable gloves tested to EN374.
.
Refuelling
(PROC 8b)
Provide adequate general and local exhaust ventilation.
Recommendation:
Use drum pumps or carefully pour from container.
Wear suitable gloves tested to EN374.
.
Dipping, immersion and pouring
(PROC 8b)
Wear suitable gloves tested to EN374.
.
General exposures
(PROC 1, PROC 2, PROC 3, PROC 16)
No specific measures identified.
.
Equipment cleaning and maintenance
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.
.
Vessel and container cleaning
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.
.
Storage
(PROC 1, PROC 2)
No specific measures identified.

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Exposure scenario
Use as a fuel - Consumer

Identification

Product name	Renewable hydrocarbons (diesel type fraction)
EU REACH registration number	01-2119450077-42-XXXX
Version number	2017
Es reference	23

1. Title of exposure scenario

Main title	Use as a fuel - Consumer
Process scope	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Product category	PC13 Fuels.
Main sector	SU21 Consumer uses

Environment

Environmental release category	ERC9a Widespread use of functional fluid (indoor) ERC9b Widespread use of functional fluid (outdoor)
SPERC	ESVOC SPERC 9.12c.v1

Non-industrial

Product sub-category	PC13_1 Liquid: automotive refuelling PC13_2 Liquid: scooter refuelling PC13_3 Liquid: garden equipment - use PC13_4 Liquid: Garden equipment - Refuelling PC13_5 Liquid: lamp oil PC13_6 Liquid: home space heater fuel PC13_n Liquid: refuelling of boats

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 0,1
Daily amount per site: ≤ 550 kg

Frequency and duration of use

Emission days: 365 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air	0,01 %
Emission factor - water	0,001 %
Emission factor - soil	0,001 %

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Risk management measures

Use as a fuel - Consumer

Technical measures	Indoor/outdoor use.
STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Disposal method	Dispose of waste in accordance with environmental legislation.

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Concentration details Covers percentage substance in the product up to 100% (unless stated differently).

Amounts used

PC13_1 Liquid: automotive refuelling
For each use event, covers use amounts up to 38,6 kg.
PC13_2 Liquid: scooter refuelling
For each use event, covers use amounts up to 7,5 kg.
PC13_3 Liquid: garden equipment - use
For each use event, covers use amounts up to 772 g.
PC13_4 Liquid: Garden equipment - Refuelling
For each use event, covers use amounts up to 772 g.
PC13_5 Liquid: lamp oil
For each use event, covers use amounts up to 100 g.
PC13_6 Liquid: home space heater fuel
For each use event, covers use amounts up to 3320 g.
PC13_n Liquid: refuelling of boats
For each use event, covers use amounts up to 156,0 kg.

Frequency and duration of use

Use as a fuel - Consumer

Covers use up to 1 time(s)/day.
.
PC13_1 Liquid: automotive refuelling
Covers exposure up to 0,05 hours per event.
(occasional use over a year)
.
PC13_2 Liquid: scooter refuelling
Covers exposure up to 0,02 hours per event.
(frequent use over a year)
.
PC13_3 Liquid: garden equipment - use
Covers exposure up to 2,00 hours per event.
(occasional use over a year)
.
PC13_4 Liquid: Garden equipment - Refuelling
Covers exposure up to 0,03 hours per event.
(occasional use over a year)
.
PC13_5 Liquid: lamp oil
Covers exposure up to 0,01 hours per event.
(occasional use over a year)
.
PC13_6 Liquid: home space heater fuel
Covers exposure up to 0,1 hours per event.
(frequent use over a year)
.
PC13_n Liquid: refuelling of boats
Covers exposure up to 0,25 hours per event.
(infrequent use over a year)

Human factors not influenced by risk management

Potentially exposed body parts	Palm of one hand. Unless otherwise stated. PC13_4 Liquid: Garden equipment - Refuelling : Palm of both hands.

Other given operational conditions affecting Non-industrial exposure

Setting	Outdoor use. Unless otherwise stated. PC13_5 Liquid: lamp oil : Indoor/outdoor use.

Other given operational conditions affecting Non-industrial exposure

Avoid contact with skin, eyes and clothing. Wash promptly if skin becomes contaminated. All handling should only take place in well-ventilated areas. Do not ingest. If swallowed, then seek immediate medical assistance.

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Exposure scenario
Use as Intermediate - Industrial

Identification

Product name	Renewable hydrocarbons (diesel type fraction)
EU REACH registration number	01-2119450077-42-XXXX
Version number	2017
Es reference	05

1. Title of exposure scenario

Main title	Use as Intermediate - Industrial
Process scope	Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).
Main sector	SU3 Industrial uses

Environment

Environmental release category	ERC6a Use of intermediate
SPERC	ESVOC SPERC 6.1a.v1

Worker

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Amounts used

Fraction of EU tonnage used in region: 1
Daily amount per site: ≤ 50 t
Annual amount per site: ≤ 15 000 t

Frequency and duration of use

Emission days: 300 days/year

Other given operational conditions affecting environmental exposure

Emission factor - air	0,002%
Emission factor - water	0,001%
Emission factor - soil	0.1%

Use as Intermediate - Industrial

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100

Risk management measures

STP type	Aerobic biological treatment
STP details	Assumed domestic sewage treatment plant flow (m³/day): 2000.

Conditions and measures related to external treatment of waste for disposal

Disposal method	Dispose of waste in accordance with environmental legislation.

Conditions and measures related to external recovery of waste

Recovery method	Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers percentage substance in the product up to 100% (unless stated differently).

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Human factors not influenced by risk management

Potentially exposed body parts	PROC 1, PROC 3, PROC 15: Covers skin contact area up to 240 cm². Palm of one hand. PROC 2, PROC 4: Covers skin contact area up to 480 cm². Palm of both hands. PROC 8a, 8b: Covers skin contact area up to 960 cm². Both hands.

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	≤ 40 °C
Ventilation rate	1 - 3 air changes per hour Unless otherwise stated. Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Use as Intermediate - Industrial

General exposures (closed systems)
(PROC 1)
No specific measures identified.

General exposures (closed systems)
With sample collection
With occasional controlled exposure
(PROC 2)
No specific measures identified.

General exposures (closed systems)
Batch process
(PROC 3)
No specific measures identified.

General exposures (open systems)
Batch process
With sample collection
(PROC 4)
No specific measures identified.

Sampling
(PROC 8b)
No specific measures identified.

Laboratory activities
(PROC 15)
Provide adequate general and local exhaust ventilation.
Wear suitable gloves tested to EN374.
Recommendation:
Handle in a fume cupboard or under extract ventilation.

Bulk transfers
(closed systems)
(PROC 8b)
No specific measures identified.

Equipment cleaning and maintenance
(PROC 8a)
Provide adequate general and local exhaust ventilation.
Recommendation:
Drain down and flush system prior to equipment break-in or maintenance.
Wear suitable gloves tested to EN374.

Storage
(PROC 1, PROC 2)
No specific measures identified.

3. Exposure estimation (Environment 1)

Assessment method Used Petrorisk model.

3. Exposure estimation (Health 1)

Assessment method Used CHESAR model.

Biofuel Express är ledande distributör av 100% fossilfria biobränslen som HVO Syntetisk Diesel och B100 Biodiesel (RME). Vårt huvudfokus är marknaden för 100% biobränsle. Vi brinner för den gröna miljöpåverkan av hållbara bränslen.

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