

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
Revision date	27.06.2022

1.1. Product identifier

Product name	Renewable diesel
UFI	Y7G7-A4HD-Y40T-G4E4
Synonyms	HVO
Article no.	154714

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 10 768 0862

Email	tuotelaatu@neot.fi
Website	www.neot.fi/en
Enterprise No.	FI18010565

1.4. Emergency telephone number

Emergency telephone	<p>Telephone number: 112 Description: General emergency telephone number</p> <p>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</p>
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	<p>Asp. Tox. 1; H304</p> <p>EUH 066</p>
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2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Renewable hydrocarbons (diesel type fraction)
Signal word	Danger
Hazard statements	<p>H304 May be fatal if swallowed and enters airways.</p> <p>EUH 066 Repeated exposure may cause skin dryness or cracking.</p>
Precautionary statements	<p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor / .</p> <p>P331 Do NOT induce vomiting.</p>

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 (diesel type fraction)	<p>EC No.: 618-882-6</p> <p>REACH Reg. No.:</p>	<p>Asp. tox. 1; H304;</p> <p>EUH 066;</p>	~ 100 %	

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

Medical treatment	Treat symptomatically.
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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 (CO ₂).

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 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.
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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.
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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).
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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 product. If required, use personal protective equipment.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	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.
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7.3. Specific end use(s)

Specific use(s)	None reported.
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SECTION 8: Exposure controls / personal protection

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 ³	
Control parameters comments	The individual limit values can be applied for the hydrocarbons. Diesel fuel as total hydrocarbons; ACGIH TLV®-TWA (8h) 100 mg/m ³ (IFV).		

DNEL / PNEC

PNEC	Comments: Not determined (poorly soluble in water)
Substance	Renewable hydrocarbons (diesel type fraction)
DNEL	<p>Group: Professional Route of exposure: Long-term inhalation (systemic) Value: 147 mg/m³ Reference: Day.</p> <p>Group: Professional Route of exposure: Long-term dermal (systemic) Value: 42 mg/kg bw/day</p> <p>Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 94 mg/m³</p> <p>Group: Consumer</p>

Route of exposure: Long-term dermal (systemic)

Value: 18 mg/kg bw/day

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 control

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 mm ² /s Method: OECD 114 Temperature: 20 °C Type: Kinematic Value: 2.6 mm ² /s Method: OECD 114 Temperature: 40 °C Type: Kinematic

	Value: ≤ 5 mPa.s Temperature: 20 °C Type: Dynamic
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.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

Stability	Chemically stable under normal storage conditions.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known under normal use conditions.
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10.4. Conditions to avoid

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

Materials to avoid	Oxidizing agents.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products known.
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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.

Other information regarding health hazards

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

Symptoms of exposure

In case of ingestion	The product causes irritation of mucous membranes and may cause abdominal discomfort if swallowed.
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11.2 Other information

Endocrine disruption	No information.
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SECTION 12: Ecological information

12.1. Toxicity

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	<p>Toxicity type: Acute Value: > 100 mg/l Effect dose concentration: EL50 Exposure time: 72 hour(s) Test reference: WAF (OECD 201)</p>
Substance	Renewable hydrocarbons (diesel type fraction)
Aquatic toxicity, crustacean	<p>Toxicity type: Acute Value: > 100 mg/l Effect dose concentration: EL50 Exposure time: 48 hour(s) Test reference: WAF (OECD 202)</p> <p>Toxicity type: Chronic Value: 1 mg/l Effect dose concentration: NOEC Exposure time: 21 day(s) Test reference: WAF (OECD 211)</p> <p>Toxicity type: Chronic Value: 3,2 mg/l Effect dose concentration: LOEC Exposure time: 21 day(s) Test reference: WAF (OECD 211)</p>
Substance	Renewable hydrocarbons (diesel type fraction)
Toxicity to sediment living organisms	<p>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</p> <p>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</p> <p>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</p>
Substance	Renewable hydrocarbons (diesel type fraction)
Impact on sewage treatment	<p>Value: > 1000 mg/l Effect dose concentration: EC50 Exposure time: 30 minute(s) Test reference: OECD 209 Comments: Toxicity to micro-organisms (sludge).</p> <p>Value: > 1000 mg/l Effect dose concentration: EC50</p>

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.
Biodegradability	Method: OECD 301B Comments: Quickly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Possibly bioaccumulative. log Kow: > 6,5 (EC A8)
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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)
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any PBT or vPvB substances.
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12.6. Endocrine disrupting properties

Endocrine disrupting properties	No information.
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12.7. Other adverse effects

Additional ecological information	Not known.
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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.
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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

Proper shipping name English	DIESEL FUEL
ADR/RID/ADN	
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.
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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
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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.
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15.2. Chemical safety assessment

Chemical safety assessment performed	Yes
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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: <ol style="list-style-type: none"> 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 <p>DO NOT TRY TO SUCK DIESEL OIL USING YOUR MOUTH.</p>
Additional information	Neot Oy, Tuotelaatu, +358 10 768 0862, 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

Information added, deleted or revised

Version

Exposure scenario

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.

Section 16 Other information

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