

DIESEL

Ekodiesel ULTRA B, D, F, Class 2; EFECTA DIESEL B,D,F, VERVA ON B,D,F

Compilation date: 16.12.2005

Revision: 19.04.2021

Version: 5 (4.11.2024)

SAFETY DATA SHEET

In accordance with REACH Regulation

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

1.1. Product identifier

Trade name:	Ekodiesel Ultra B Ekodiesel Ultra D,F Diesel Class 2 EFECTA DIESEL B EFECTA DIESEL D,F VERVA ON B VERVA ON D,F VERVA ON with Powerguard 6601	UFI: CS00-H01G-F00Q-S4XV UFI: PV00-00QV-S006-FGHX UFI: SH00-Y0Y9-J007-S46P UFI: C800-F0W3-M00R-T3FG UFI: XC00-Y0KG-X007-FF1J UFI: KF00-G08W-700Q-4SMM UFI: PM00-G0NP-U00Q-FFSR UFI: Q450-Q03A-800D-RXQS
Contains:	Fuels, diesel	

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

Identified uses: Fuel for diesel engines used for ground transportation.

Uses advised against: Others then those listed above.

1.3. Details of the supplier of the safety data sheet

Manufacturer:	ORLEN S.A.
Address:	09-411 Płock, ul. Chemików 7, Poland
Telephone no./ Fax no.:	Central: Telephone no. (+48 24) 365 00 00; Fax no.: (+48 24) 365 40 40
E-Mail:	reach@orlen.pl (an e-mail address for a competent person responsible for the safety data sheet)

1.4. Emergency telephone number

Company Fire Brigade 19 998

The National Emergency Centre for the Transport of Dangerous Goods – SPOT 24 h: (+48 24) 365 70 32 and (+48 24) 365 70 33 (available 24h)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification	According to Regulation (EC) no. 1272/2008 (CLP)
Hazard	
for physical-chemical properties:	Flam Liq. 3, H226 Flammable liquid and vapour.
for health hazards:	Acute toxicity – inhalation: Acute Tox. 4 (H332 Harmful if inhaled). Skin corrosion/irritation: Skin Irrit. 2 (H315 Causes skin irritation). Aspiration hazard Asp.: Asp. Tox. 1 (H304 May be fatal if swallowed and enters airways). Carcinogenicity: Carc. 2 (H351 Suspected of causing cancer). Specific target organ toxicity — repeated exposure: STOT RE 2 (H373 May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure).
for environmental hazards:	Hazardous to the aquatic environment: Aquatic Chronic 2 (H411 Toxic to aquatic life with long lasting effects).

2.2. Label elements

Hazard pictogram(s): GHS02		GHS07		GHS08		GHS09	
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Signal word(s): Danger

Hazard statement(s):

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer
H373	May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P501	Dispose of contents/container to a licensed waste disposal company.

Additional labelling:

EUH208	Contains maleic anhydride. May produce an allergic reaction.
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2.3. Other hazards

The product does not contain components that meet the criteria for PBT or vPvB and is not PBT/vPvB in accordance with Annex XIII of REACH Regulation. Vapours may form explosive mixtures with air. Vapours are heavier than air, spread right above ground surface and accumulate in the lower parts of rooms. Ignition from open flames, sparks, hot surfaces. Closed containers exposed to fire or high temperature may explode due to increased internal pressure.

The product does not contain components that are included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2. Mixtures

Substance name	% vol.	CAS no.	EC no.	Index no.	Classification	Registration no.
Fuels, diesel	83 - 100	68334-30-5	269-822-7	649-224-00-6	Flam Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411	01-2119484664-27-0073
Petroleum gas oil fraction, co-processed with renewable hydrocarbons of plant and/or animal origin	0 - 10	Not applicable	941-364-9	Not applicable	Flam Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Asp. Tox. 1, H304 Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 2, H411	01-2120091562-55-0013
Fatty acids, C16-18 and C18-unsatd., Me esters	0 - 7	67762-38-3	267-015-4	Not applicable	Not applicable	01-2119471664-32-xxxx
Fatty acids, vegetable-oil, Me esters		68990-52-3	273-606-8	Not applicable	Not applicable	01-2119485821-32-xxxx
Fatty acids, C10-18 and C12-22-unsatd., C14-18 and C16-18-unsatd. alkyl esters		85049-31-6	285-200-8	Not applicable	Not applicable	01-2119675342-38-xxxx
Fatty acids, rape-oil, Me esters		85586-25-0	287-828-8	Not applicable	Not applicable	n/a

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A combination of hydrocarbons having carbon numbers predominantly in the range of C9 through C25 petroleum origin (diesel oil) and FAME (Fatty Acid Methyl Esters) eg. $C_{17}H_{33}COOCH_3$. It contains additives: detergents, lubricating additives, anti-corrosion additives, additives that improves resistance to oxidation, additives that increase cetane number, emulsifiers and depressants; It may contain defoamers, biocides and fuel marker (up to 3 000 ppm).

The product may contain substances listed below (in additive packages) that are below concentration limit but with OELs assigned.

Substance identifier	Substance name	% (m/m)	<u>Classification</u>
CAS no.: 27247-96-7 EC no.: 248-363-6 Index no.: Not applicable Registration no.: 01-2119539586-27-xxxx	2-ethylhexyl nitrate	0 - <0.2	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Aquatic Chronic 2, H411 EUH044, EUH066
CAS no.: 111-76-2 EC no.: 203-905-0 Index no.: 603-014-00-0 Registration no.: 01-2119475108-36-xxxx	2-butoxyethanol	0 - <0.1	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 ATE [inhalation] = 3 mg/l (vapours) ATE [oral] = 1200 mg/kg
CAS no.: 78-83-1 EC no.: 201-148-0 Index no.: 603-108-00-1 Registration no.: 01-2119484609-23-xxxx	iso-butanol	0 - <0.05	Flam. Liq. 3, H226 STOT SE. 3, H335 STOT SE. 3, H336 Skin Irrit. 2, H315 Eye Dam. 1, H318
CAS no.: 91-20-3 EC no.: 202-049-5 Index no.: 601-052-00-2 Registration no.: not applicable (impurity)	naphthalene	0 - <0.02	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
CAS no.: 104-76-7 EC no.: 203-234-3 Index no.: Not applicable Registration no.: 01-2119487289-20-xxxx	2-ethylhexan-1-ol	0 - <0.02	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335
CAS no.: 95-63-6 EC no.: 202-436-9 Index no.: 601-043-00-3 Registration no.: not available	1,2,4-Trimethylbenzene	0 - <0.01	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 2, H411
CAS no.: 108-31-6 EC no.: 203-571-6 Index no.: 607-096-00-9 Registration no.: 01-2119472428-31-xxxx	maleic anhydride	0 - <0.001	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 (respiratory system) (inhalation) EUH071 ATE [oral] = 1090 mg/kg Skin Sens. 1A, H317: $C \geq 0.001\%$

The text of the H-phrases is shown in section 16 of the safety data sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation:

Immediately remove to fresh air, keep warm and calm.

Control the patency of the respiratory tract.

If a victim is conscious, place him in a semi-sitting position, if unconscious, lay him in the recovery position

In case of breathing disorders, if possible, administer oxygen. If not breathing, start artificial respiration (do not use mouth-to-mouth method).

In case of cardiac arrest, perform cardiopulmonary resuscitation (CPR) (qualified person only).

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Get medical attention immediately.

Contact with skin:

Take off contaminated clothing and boots. Wash contaminated skin with water and soap, and then rinse with plenty of water. If irritation or any other symptoms appear or persist, consult a doctor.

Contact with eyes:

Remove contact lenses, if present. Flush contaminated eyes with plenty of water for 15 minutes holding the eyelids open. Attention: protect the non-contaminated eye.

If irritation or any other symptoms appear or persist, consult a doctor.

In case of persistent irritation, pain, swelling, tearing or photophobia, consult an ophthalmologist.

ATTENTION: Do not use strong streams of water, which can cause cornea damage.

Ingestion:

Do not induce vomiting – aspiration hazard. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration.

If a victim is conscious, wash mouth with water and give 200 ml of liquid paraffin to drink. **Do not give milk, oil, alcoholic beverages.**

Get medical attention immediately.

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

Inhalation: Causes redness, mucous membranes of the mouth disorders, coughing, headaches and dizziness, sometimes intoxication, drowsiness, coma, impaired memory, blurred vision, nervousness and irritability, shortness of breath, bronchopneumonia, nausea, vomiting; high vapour concentrations may cause sudden loss of consciousness, convulsions.

Ingestion: Causes nausea, vomiting, temporary symptoms of liver damage, the risk of aspiration pneumonia, bloody haemorrhages in lungs, pleural effusions.

Contact with eyes: High vapour concentration causes eyes mucous membranes irritation; direct contact causes tearing, redness, irritation.

Contact with skin: redness, dryness, irritation.

Chronic exposure: Disorders of the central nervous system within the peripheral nerves that persist after exposure; chronic conjunctivitis; smell disorders.

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

Do not induce vomiting, do not give anything by mouth to an unconscious person. Show the safety data sheet or label to a medical personnel providing first aid.

Consider administration of activated carbon as a slurry (30 g of activated carbon mixed with 240 ml of water).

Apply oxygen therapy or intubation and artificial respiration. Control the heart rate (EKG).

Do not administer adrenaline and other catecholamines.

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

General recommendations

Inform others about fire; all persons not directly involved with the operation should remain clear of the area (danger zone); order evacuation if necessary; call the rescue teams, the fire brigade and the State Police.

5.1. Extinguishing media

Suitable Extinguishing Media: small fire - carbon dioxide, dry chemical powder, foam; large fire – water spray or mist, foam.

Unsuitable Extinguishing Media: water jets.

5.2. Special hazards arising from the substance or mixture

Flammable liquid and vapour. Vapours form explosive mixtures with air. Closed containers exposed to fire or high temperature may explode due to increased internal pressure. In the event of fire, carbon oxides and other unidentified hydrocarbon decomposition products may be generated. Avoid breathing combustion products - it can be hazardous to your health.

5.3. Advice for firefighters

Follow the guidelines for the fire extinguishment of chemicals.

Extinguish **small fire** with foam or dry chemical powder.

Extinguish **large fire** from a safe distance, behind shields, using a remote sprinkler system or unmanned water jets - risk of explosion.

Cool down imperilled containers with water spray from a safe distance (risk of explosion); if **possible and safe** remove from

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a danger zone. Prevent from entering contaminated water and other extinguishing agents into sewage system and water. Follow the guidelines for the fire extinguishment of chemicals. People should be properly trained and equipped with protective clothing and a self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use adequate personal protective equipment as required in Section 8 of the safety data sheet.

Inform others about the accident; all persons not directly involved with the operation should remain clear of the area (danger zone); order evacuation if necessary.

Avoid direct contact with the released product. Avoid breathing vapours/mist.

Provide adequate ventilation if released in confined area.

Remove all sources of ignition – do not use open flame, do not smoke, do not use sparking tools etc.

Disperse vapours with water spray.

ATTENTION: Risk of explosion. Risk of fire and explosion. Prevent vapour accumulation above the ground level or in confined spaces in order to avoid accumulation of explosive concentrations.

Vapours can spread considerable distance to source of ignition and flashback

6.2. Environmental precautions

Prevent from entering into the sewage system, surface water or soil. If possible and safe, eliminate or limit the leakage (seal the leakage, close liquid supply, place the damaged container in an emergency container). Construct a dike to prevent spreading.

Inform relevant authorities, if released large quantities of product and contamination of the environment (OHS services, rescue services, environmental protection services, administrative authorities).

6.3. Methods and material for containment and cleaning up

If possible and safe, eliminate or limit the leakage (seal the leakage, close liquid supply), place the damaged container in an emergency container. Dike large spill and pump it out carefully. Small spills cover with non-flammable absorbent (sand, earth, vermiculite), collect into the tightly closed waste containers. Dispose of in compliance with current legislation. If necessary, obtain help from an authorized companies dealing with waste transport and utilization.

6.4. Reference to other sections

Refer to Sections 8 and 13 of the safety data sheet.

SECTION 7: HANDLING AND STORAGE

Diesel oil is a mixture of hydrocarbons of varying toxicity. It is classified as suspected of causing cancer. Therefore, exposure should be minimized by introducing appropriate risk management measures.

Workers should be trained in terms of health hazard, safety precautions to minimize exposure, OHS requirements, PPE usage, accidents and emergency situations prevention as well as proper rescue operations.

7.1. Precautions for safe handling

Recommendations for safe handling: avoid prolonged skin contact; avoid eye contamination; avoid breathing vapours/mist; Prevent formation of hazardous concentrations of vapours in air. Provide adequate ventilation; provide exhaust ventilation at places where emission of vapours is possible. Keep unused containers sealed. Containers should only be opened in a fume hood. Opened containers should be re-sealed and stored upright to prevent leakage. Do not use compressed air to fill or empty the containers or transfer the product. Use adequate personal protective equipment as required in Section 8 of the safety data sheet.

Recommendations for fire and explosion protection: prevent formation of flammable/explosive concentration of vapours/mist; remove all sources of ignition - do not use open flame, do not smoke, do not use clothing made of fabric susceptible to electrification; Protect containers against overheating, use explosion-proof electrical equipment, use bonding and grounding. Comply with regulations regarding explosive atmosphere, handling and storage of flammable products.

Recommendations for occupational health and safety

Observe all applicable occupational health and safety regulations. Observe the principles of good industrial hygiene.

Do not eat, drink or smoke in the workplace. Wash hands with water and soap after work. Do not use contaminated clothing. Take off immediately all contaminated clothing and wash it before reuse.

ATTENTION: Emptied, non-cleaned containers may contain product residues (liquid, vapours) and may pose a fire/explosion hazard. Be careful. Do not cut, drill, grind, weld uncleaned containers or perform these activities in their vicinity.

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7.2. Conditions for safe storage, including any incompatibilities

Diesel oil should be stored in accordance with regulations regarding storage of flammable liquids. Store in an original, properly labelled, tightly closed containers made of stainless steel or soft steel, in a cool and well-ventilated place. Store away from sources of heat, sources of ignition, protect from direct sunlight. Store away from strong oxidizing agents. Storage area should be equipped with explosion-proof ventilation and electrical installation. Do not smoke, do not use open flame and sparking tools in the storage area.

7.3. Specific end use(s)

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Highly refined mineral oils - Inhalable fraction PL: NDS: 5 mg/m³, NDSCh: –, NDSP: –

EU: –

UK: –

Possible components:

Naphthalene [CAS 91-20-3]

Poland: NDS: 20 mg/m³; NDSCh: 50 mg/m³; NDSP: -

UK: –

EU: –

Trimethylbenzene [CAS 526-73-8; 95-63-6; 108-67-8; 25551-13-7]

PL: NDS: 100 mg/m³; NDSCh: 170 mg/m³; NDSP: -

UK: OEL 8h: 125 mg/m³; 25 ppm, STEL: -

EU: OEL 8h: 100 mg/m³; 20 ppm, STEL: -

2-ethylhexan-1-ol [CAS 104-76-7]

PL: NDS: 5.4 mg/m³; NDSCh: 10.8 mg/m³; NDSP: -

UK: –

EU: OEL 8h: 5.4 mg/m³; 1 ppm, STEL: -

2-ethylhexyl nitrate [CAS 27247-96-7]

PL: NDS: 3.5 mg/m³; NDSCh: 7 mg/m³; NDSP: -

UK: –

EU: –

2-butoxyethanol [CAS 111-76-2]

PL: NDS: 98 mg/m³; NDSCh: 200 mg/m³; NDSP: -

UK: OEL 8h: 123 mg/m³; 25 ppm, STEL: 246 mg/m³; 50 ppm

EU: OEL 8h: 98 mg/m³; 20 ppm, STEL: 246 mg/m³; 50 ppm

iso-butanol [CAS 78-83-1]

PL: NDS: 100 mg/m³; NDSCh: 200 mg/m³; NDSP: -

UK: OEL 8h: 154 mg/m³; 50 ppm, STEL: 231 mg/m³; 75 ppm

EU: –

maleic anhydride [CAS 108-31-6]

PL: NDS: 0.5 mg/m³; NDSCh: 1 mg/m³; NDSP: -

UK: OEL 8h: 1 mg/m³, STEL: 3 mg/m³

EU: –

Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum permissible concentration and intensity of harmful factors in the work environment (Journal of Laws 2018, item 1286; 2020, item 61; 2021, item 325)
Commission Directive 2000/39/EC with amendments.

Fuels, diesel:

DNEL_{worker} (inhalation, acute exposure)

4300 mg/m³ 15 min.

DNEL_{worker} (dermal, long-term exposure)

2.9 mg/kg/8h

DNEL_{workerk} (inhalation, long-term exposure)

68 mg/m³/8h (aerosol)

DNEL_{consumer} (inhalation, acute exposure)

2600 mg/m³ 15 min.

DNEL_{consumer} (dermal, long-term exposure)

1.3 mg/kg/24h

DNEL_{consumert} (inhalation, long-term exposure)

20 mg/m³/24h (aerosol)

PNEC_{freshwater, marine mater, sediment, soil, STP}

Not applicable – mixture of UVCB substances

8.2. Exposure controls

Physical form of the product: liquid, vapour pressure at STP (25°C) < 0.5 kPa.

Frequency and duration of use/exposure: covers daily exposures up to 8 hours (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented. Operation is carried out at elevated temperatures (>20°C above ambient temperature).

Appropriate engineering controls:

Process containment is recommended. Explosion-proof ventilation and electrical installation. Provide general and/or local exhaust ventilation to keep vapours concentration below harmful limits. Local exhaust ventilation is preferred, since it controls emission at its source and prevents spreading. It is recommended the use pump barrel for transferring.

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Reduce exposure by using measures such as closed systems, dedicated installations or facilities and adequate (general and local) exhaust ventilation. Empty the systems and clean transfer lines prior to opening of the protective housing. If possible, wash/ rinse the equipment prior to maintenance works.

If there is a risk of exposure: provide specialized training to operators to minimize exposure, wear appropriate PPE, collect spills and dispose of waste in a safe manner, carry out regular inspections, tests and maintenance of all control measures, consider the need for health checks depending on the risk.

Individual protection measures, such as personal protective equipment:

Eye and face protection:

Tightly fitting safety glasses (goggles) if there is a risk of splashing into the eye or exposure to vapours.

Skin protection:

Wear protective, impervious gloves that are resistant to oils (e.g. perbutane of thickness > 0,1 mm, breakthrough time > 480 min., Viton of thickness > 0,1 mm, breakthrough time > 480 min., butyl rubber of thickness > 0,1 mm, breakthrough time > 480 min). Selection of the glove material requires consideration of the penetration times, rates of diffusion and the degradation. It is recommended to change gloves regularly or immediately if they are used or damaged (torn or punctured) or its appearance change (color, elasticity, shape). An apron or coated fabric clothing, resistant to the product. Wear oil resistant, non slip boots.

Respiratory protection:

Not required when used in normal conditions. In case of insufficient ventilation use approved respirator with A type filter. Use self-contained breathing apparatus in case of working in a confined area/insufficient oxygen concentration/large uncontrolled emission/ any other cases where respirator with filter does not provide adequate protection.

Thermal hazards:

Not specified.

Environmental exposure controls:

Prevent release of non-dissolved substance and recovery from local waste water. The risk of environmental exposure depends on the indirect exposure of humans (mainly via oral route) and the freshwater sediment. Local treatment of waste water is not required when released to a sewage treatment plant from a household.

Do not pour industrial sludge onto natural soil. Burn, neutralize or recondition the sludge.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Physical state	: Liquid
b) Colour	: Colourless or light yellow
c) Odour	: Characteristic
d) Melting point/freezing point	: Not determined
e) Boiling point or initial boiling point and boiling range	: 175-180°C - Initial boiling point 95 % vol. distills to 360 °C
f) Flammability	: Flammable liquid and vapour
g) Lower and upper explosion limit	: No data (NOTE: Under specific conditions, product vapours may form explosive mixtures with air).
h) Flash point	: >56°C
i) Auto-ignition temperature	: ca 240°C (DIN51794:2003-05)
j) Decomposition temperature	: Not applicable - mixture
k) pH	: Not applicable
l) Kinematic viscosity (PN-EN ISO 3104)	: 2.0 – 4.5 mm ² /s at 40°C : ca. 2.151 mm ² /s at 50°C For Class 2: 1.5-4,0 mm ² /s at 40°C
m) Solubility	: Insoluble in water; soluble in alcohols, hydrocarbons, ethers, carbon disulfide, carbon tetrachloride, chloroform
n) Partition coefficient n-octanol/water (log value)	: Not applicable - mixture
o) Vapour pressure	: Not applicable
p) Density and/or relative density	: 0.800 – 0.845 g/cm ³ at 15°C
q) Relative vapour density	: ca. 6 (air = 1)
r) Particle characteristics	: Not applicable

9.2. Other information

Surface tension : Not applicable

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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The mixture is not reactive.

10.2. Chemical stability

The product is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Remove all sources of ignition: sparks, electrostatic discharges, open flames, heat sources. Avoid ignition and heat sources in particular in a potentially explosive area.

10.5. Incompatible materials

Strong oxidizers. It can soften or dissolve some plastics.

10.6. Hazardous decomposition products

Not known. Hazardous combustion products are included in Section 5 of the safety data sheet.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:

Fuels, diesel:

LD50: >2000 mg/kg (oral, rat)

LC50: 4100 mg/m³ (inhalation, rat, 4h)

LD50: >5000 mg/kg (dermal, rabbit)

Harmful if inhaled.

Skin corrosion/irritation:

Causes skin irritation. Causes redness, dryness and irritation.

Serious eye damage/irritation:

High vapour concentrations cause mild irritation of the mucous membranes; Direct contact with the liquid causes lacrimation, conjunctival redness, mild irritation.

Respiratory or skin sensitisation:

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

Germ cell mutagenicity:

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

Carcinogenicity:

Product is classified as carcinogenic cat. 2. Due to the possibility of the challenge the analysis of PAHs and high content of phenanthrene, and pyrene in some samples, it is suspected of causing cancer. Route of exposure: dermal.

Reproductive toxicity:

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

Fuels, diesel: The toxicological studies in animals via inhalation and dermal route of exposure revealed effects of diesel oil on reproductive system development and function depending on the route of exposure.

Fertility:

NOAEL (dermal): 500 mg/kg bw/day.

NOAEC (inhalation): 1710 mg/m³ air.

Developmental studies:

NOAEL (dermal): 125 mg/kg bw/day.

NOAEC (inhalation): 2110 mg/m³ air.

STOT-single exposure:

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

STOT-repeated exposure:

May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.

Aspiration hazard:

May be fatal if swallowed and enters airways.

11.2. Information on other hazards

Endocrine disrupting properties: none.

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SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic compartment:

Fuels, diesel:

EL50: 68 mg/l - acute toxicity study on freshwater invertebrates; *Daphnia magna*, 48h

NOEL: 0.2 mg/l - chronic toxicity study on invertebrates; *Daphnia magna*, 21 d

EL50: 22 mg/l - acute toxicity study on freshwater algae; *Pseudokirchinella subcapitata*, 72h

LL50: 21 mg/l - acute toxicity study on freshwater fish; *Oncorhynchus mykiss*, 96h

NOEL: 0.083 mg/l - chronic toxicity study on freshwater fish; *Oncorhynchus mykiss*, 14 d

Sediment:

Not available.

Terrestrial compartment:

Not available.

12.2. Persistence and degradability

Biotic:

Biodegradation: Fuels, diesel: 60% after 28 days - readily biodegradable.

Abiotic:

Hydrolysis as a function of pH: hydrolysis is not expected to be an important environmental fate process (lack of hydrolysable functional groups).

Phototransformation: Not applicable.

12.3. Bioaccumulative potential

Not applicable, UVCB substance (study scientifically unjustified).

12.4. Mobility in soil

Adsorption/desorption – Not applicable, UVCB substance (study scientifically unjustified). However, it can partially penetrate the soil causing ground water contamination.

12.5. Results of PBT and vPvB assessment

The product does not contain components that meet the criteria for PBT or vPvB in accordance with Annex XIII REACH Regulation.

12.6. Endocrine disrupting properties

Not available.

12.7. Other adverse effects

Product is classified as toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste classification: Wastes are classified according to their source, pursuant to criteria specified in applicable regulations. If the product was further used in any operations/processes, the end user should define the waste type and assign a proper waste code.

Do not discharge into drains. Avoid surface and ground water contamination. Do not landfill. Consider re-use. Recycle or dispose of waste in compliance with current legislation. Preferred method: **combustion**.

Recycle or dispose of packaging waste in compliance with current legislation. Reusable packaging, it can be re-used after cleaning.

ATTENTION: Only empty and clean packaging can be recycled!

Waste disposal should be carried out by a professional, authorized incineration plant or waste treatment plants.

Directive 2008/98/EC of the European Parliament and of the Council of the Member State

SECTION 14: TRANSPORT INFORMATION



General information

Product is classified as dangerous and is subjected to the transport of dangerous goods regulations RID, ADR, IMDG, IATA.

Based on the knowledge about the product, necessary analysis and appropriate RID/ADR classification a sender should always prepare a guideline for the transportation.

DIESEL

Ekodiesel ULTRA B, D, F, Class 2; EFECTA DIESEL B,D,F, VERVA ON B,D,F

Compilation date: 16.12.2005

Revision: 19.04.2021

Version: 5 (4.11.2024)

	RID, ADR	IMDG	IATA
14.1. UN NUMBER OR ID NUMBER	UN 1202	UN 1202	UN 1202
14.2. UN PROPER SHIPPING NAME	DIESEL FUEL	DIESEL FUEL	DIESEL FUEL
14.3. TRANSPORT HAZARD CLASS(ES) Classification code Hazard identification No. Labels	3 F1 30 no. 3	3 -- -- no. 3	3 -- -- no. 3
14.4. PACKING GROUP	III	III	III
14.5. ENVIRONMENTAL HAZARDS	Hazardous for the environment. Apply specific regulations under 5.2.1.8 and 5.4.1.1.18	Hazardous for the environment	Hazardous for the environment
14.6. SPECIAL PRECAUTIONS FOR USER	Observe the provisions of applicable regulations. Observe safety precautions described in sections 7 and 8.		
14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS	Not available		

SECTION 15: REGULATORY INFORMATION

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

See section 13 of this Safety Data Sheet.

Diesel oil is listed in Annex I of the Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances (Seveso III).

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 (with amendments)

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (with amendments)

Regulation (EU) 2016/425 of the European Parliament and of the Council COUNCIL of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC

REACH Annex XVII (restrictions): not applicable

REACH Annex XIV (authorization)/SVHC Candidate List: not applicable

15.2. Chemical safety assessment

Chemical safety assessment has not been carried out for the mixture. Chemical safety assessments are available for the mixture ingredients and can be found in the chemical safety reports issued for each substance.

SECTION 16: OTHER INFORMATION

The word "BIO" in the trade names of Diesel oils (on quality certificates, invoices and other commercial documents) – it confirms the presence of FAME.

Classification method: calculation method based on the composition and test results according to criteria described In CLP Regulation.

Scope of revision: 1.2, 2, 3, 13, 15, 16. Version 3: sections 8.2 and 15. Version 4: sections 9 and 15. Version 5: sections 1.1, 3, 8.1, 9, 10.4, 13, 14, 15. Version 6: sections 3.2, 8.1. Version 7: section 9p, Version 8: section 3. Version 9: section 3. Version 10: regulation EU 2020/878.

Version: 1 (19.04.2021) : section 1 : UFI ,

Version: 2 (11.05.2022) : section 16 : information about trade names of Diesel + "BIO"

Version 3 (05.07.2023): 1.1 (UFI), 1.3, 2.2, 3, 8.1, 16.

Version 4 (14.08.2024): 1.1 (UFI), 2.3, 11.2, 12.6.

Version 5 (4.11.2024): section 3 (2-ethylhexyl nitrate)

Information provided herein serves only as guidelines for safe transport, distribution, handling and storage. It cannot be considered as a quality certificate.

This information applies only to specific material designated and may not be suitable for such material used in combination with any other materials or in any other manner not described in this document.

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The product user must observe all applicable standards and regulations and is liable for improper use of information contained in the safety data sheet and improper use of the product.

Additional information to ensure protection of human health and the environment

The employer is obliged to comply with the provisions described in regulations listed in section 15 of the safety data sheet (if applicable to a particular case):

- workers should be trained in terms of health hazard, OHS requirements, PPE usage, accidents prevention as well as proper rescue operations etc.,
- health checkup for employees,
- control the working environment, in particular methods for early exposure detection should be used,
- keep the registry of work and workers,
- undertake measures to reduce exposure.

A list of relevant hazard statements and/or precautionary statements which are not written out in full under Sections 2 to 15

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H372	Causes damage to organs.
H373	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH044	Risk of explosion if heated under confinement.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

Legend to abbreviations and acronyms used in the safety data sheet

NDS	Threshold Limit Value
NDSch	Short Term Exposure Limit
NDSP	Threshold Limit Value-Ceiling
UVCB	Substance of unknown or variable composition, complex reaction products or biological materials
vPvB	Very persistent and very bioaccumulative (substance)
PBT	Persistent, bioaccumulative and toxic (substance)
PNEC	Predicted No Effect Concentration
DNEL	Derived No Effect Levels
BCF	Bioconcentration factor
LD ₅₀	Dose of a tested substance causing 50% lethality during a specified time interval
LC ₅₀	Lethal Concentration 50%, concentration required to kill half the members of a tested population after a specified test duration
EC _x	The effective concentration of substance that causes x% of the maximum response
IC ₅₀	The half maximal inhibitory concentration
STOT	Specific target organ toxicity
NOEL(C)	No observed effect level (concentration)
RID	Regulations on International Railway Carriage of Dangerous Goods
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association

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Exposure scenario: information from the exposure scenarios has been included in the text of the SDS.