Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Diesel fuel for moderate climates of class B, D, F; Diesel fuel for arctic climate class 2

Version number: GHS 1.0 Date of compilation 02.08.2023

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

1.1 Product identifier

Trade name	**Diesel fuel for moderate climates of class B, D, F; Diesel fuel for arctic climate class 2**
Registration number (REACH)	not relevant (mixture)
Unique formula identifier (UFI)	N600-1098-200P-52QQ

Other means of identification

Other names or synonyms	Efecta Diesel, Verva Diesel, MN ULTRA Unipetrol / NM-B, NM-D, NM-F, NM-2 (Arctic diesel) Diesel fuel, Diesel fuel

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

Relevant identified uses	Diesel is mainly used as a motor fuel for internal combustion engines
Uses advised against	cleaning agent for lighting and heating

1.3 Details of the supplier of the safety data sheet

ORLEN Unipetrol Slovakia s.r.o
Kalinčiakova 14083/33A
831 04 Bratislava
Slovakia

Telephone: 00421248291639
e-mail: Juraj.Urbanovic@orlenunipetrol.cz

e-mail (competent person)	Juraj.Urbanovic@orlenunipetrol.cz

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.6	flammable liquid	Cat. 3	(Flam. Liq. 3)	H226
3.1I	acute toxicity (inhal.)	Cat. 4	(Acute Tox. 4)	H332
3.2	skin corrosion/irritation	Cat. 2	(Skin Irrit. 2)	H315
3.6	carcinogenicity	Cat. 2	(Carc. 2)	H351
3.9	specific target organ toxicity - repeated exposure	Cat. 2	(STOT RE 2)	H373
3.10	aspiration hazard	Cat. 1	(Asp. Tox. 1)	H304
4.1C	hazardous to the aquatic environment - chronic hazard	Cat. 2	(Aquatic Chronic 2)	H411

Remarks

For full text of H-phrases: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure. The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word **Danger**

Pictograms

GHS02, GHS07, GHS08, GHS09

Hazard statements

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 through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - general

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.

Precautionary statements - prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.

Precautionary statements - disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional labelling requirements

Child-resistant fastening	yes
Tactile warning of danger	yes
Hazardous ingredients for labelling:	Fuels, diesel, Renewable hydrocarbons (diesel type fraction)

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Diesel fuel is a complex hydrocarbon mixture with a boiling point range of 180 to 370 °C, contains polycyclic aromatic hydrocarbons and 11% m/m. Diesel can contain fatty acid methyl esters (rapeseed oil) in a maximum amount of 7% (V/V). To improve the output characteristics, it can contain suitable additives - additives for low temperature properties (antidepressants), conductive additives, lubricity additives, corrosion inhibitors, detergents and others 0 .1% (m/m) concentration.

Name of substance	Identifier	wt%	Hazard class and category	Hazard statement	Notes
Fuels, diesel	CAS No 68334-30-5 EC No 269-822-7 Index No 649-224-00-6 REACH Reg. No 01-2119484664-27-0113	≥ 60	2.6 Flam. Liq. 3 3.1I Acute Tox. 4 3.2 Skin Irrit. 2 3.6 Carc. 2 3.9 STOT RE 2 3.10 Asp. Tox. 1 4.1C Aquatic Chronic 2	H226 H332 H315 H351 H373 H304 H411	N(a)
Renewable hydrocarbons (diesel type fraction)	CAS No 928771-01-1 EC No 618-882-6 REACH Reg. No 01-2119450077-42-xxxx	≤ 40	3.10 Asp. Tox. 1	H304	
Fatty acids, C16-18 and C18-unsatd., Me esters	CAS No 67762-38-3 EC No 267-015-4 REACH Reg. No 01-2119471664-32-xxxx	≤ 7	the substance is not classified as dangerous	the substance is not classified as dangerous	

Notes

N(a): The classification as a carcinogen is mandatory. The full refining history is not known and the substance from which it is produced is a carcinogen

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
Fuels, diesel	CAS No 68334-30-5 EC No 269-822-7			11 $^{mg}/_{l}$/4h	inhalation: vapour

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash the skin thoroughly with soap and water, rinse and change clothes.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Immediately call a doctor.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Immediately call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulties. Headache. Malaise. Headaches and dizziness may occur, proceeding to fainting or unconsciousness. Has degreasing effect on the skin.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

BC-powder, carbon dioxide (CO2), foam

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. It burns with a sooty flame in the air. It could be carbon monoxide.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear protective clothing and self contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Follow emergency procedures such as the need to evacuate the danger area or to consult an expert. Remove persons to safety. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

• Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Handle with care - avoid grinding, shock and friction. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

• Warning

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

• Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

• Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

• Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation. Ground/bond container and receiving equipment.

• Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

The identified uses for this product are given in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

DNEL (dermal route of exposure): 1300 µg /kg/day
DNEL (inhalation route of exposure): 5714 µg/kg/day or 19.99 mg/m3
PNEC (secondary exposures, oral): 8.77 mg/kg. The derivation of specific PNEC values based on experimental data obtained by testing a modified water fraction containing dissolved / emulsified / suspended portions of the test substance (WAF - "Water Accomodated Fraction") is not suitable for hydrocarbon-type UVCB substances. The product risk characterization for the environment was therefore determined by the statistical carbon block method of HC5 extrapolation using the PETROTOX v.3.05 model.

• relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Fuels, diesel	68334-30-5	DNEL	68,3 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Fuels, diesel	68334-30-5	DNEL	4.300 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
Fuels, diesel	68334-30-5	DNEL	2,9 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Fuels, diesel	68334-30-5	DNEL	20 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Fuels, diesel	68334-30-5	DNEL	2.600 mg/m³	human, inhalatory	consumer (private households)	acute - systemic effects
Fuels, diesel	68334-30-5	DNEL	1,3 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Fuels, diesel	68334-30-5	DNEL	1,3 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Renewable hydrocarbons (diesel type fraction)	928771-01-1	DNEL	147 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Renewable hydrocarbons (diesel type fraction)	928771-01-1	DNEL	42 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Renewable hydrocarbons (diesel type fraction)	928771-01-1	DNEL	94 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Renewable hydrocarbons (diesel type fraction)	928771-01-1	DNEL	18 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Renewable hydrocarbons (diesel type fraction)	928771-01-1	DNEL	18 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	DNEL	6,96 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	DNEL	10 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	DNEL	23 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	DNEL	5 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	DNEL	5 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

• relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	0,01 mg/l	aquatic organisms	freshwater	short-term (single instance)
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	0,01 mg/l	aquatic organisms	marine water	short-term (single instance)
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	3.810 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	3,73 mg/kg	aquatic organisms	marine sediment	short-term (single instance)

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Renewable hydrocarbons (diesel type fraction)	928771-01-1	PNEC	761 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	PNEC	2,504 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	PNEC	0,25 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	PNEC	520 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

8.2 Exposure controls

Recommended procedure for monitoring concentrations in the working environment: gas chromatography (GC) with flame ionization detector (FID) or mass spectrophotometric detector (MS) according to technical standards STN EN 689 and STN EN 482.

Appropriate engineering controls

Follow normal health precautions when working with chemicals and mixtures. Provide adequate ventilation and local exhaust. Provide eye wash fountain or safety shower in work area.

Individual protection measures (personal protective equipment)

If workplace exposure limits are exceeded, a respiratory protection approved for this particular job must be worn. Do not eat, drink or smoke during work time. Wash hands after work and before breaks.

Eye/face protection

Wear eye/face protection. During work use protective face shield or protective goggles (EN 166).

Skin protection

Wear antistatic shoes and clothing.

• hand protection

Wear protective gloves (e.g. EN 374). Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

• type of material

NR: natural rubber, latex, Nitrile

• material thickness

0,4 mm - 1 mm.

• breakthrough times of the glove material

>120 minutes (permeation: level 4), >480 minutes (permeation: level 6)

• other protection measures

Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Particulate filter device (EN 143). Mask with filter against organic substances.

Thermal hazards

Not relevant.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	colourless - yellow, possibly greenish
Odour	characteristic

Other physical and chemical parameters

pH (value)	not determined
Melting point/freezing point	-40 – 6 °C
Initial boiling point and boiling range	141 – 462 °C
Flash point	>56 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	
• lower explosion limit (LEL)	0,6 vol%
• upper explosion limit (UEL)	6,5 vol%
Vapour pressure	0,4 Pa at 40 °C
Density	0,8 – 0,91 $^{kg}/_{m^3}$
Relative vapour density	This information is not available.
Solubility(ies)	Negligible in water
Partition coefficient	
n-octanol/water (log KOW)	1,71 – 14,7
Auto-ignition temperature	>225 °C
Viscosity	Information on this property is not available.
• kinematic viscosity	≥1,5 $^{mm^2}/_{s}$
Explosive properties	none
Oxidising properties	none

9.2 Other information

Limit experimental safe gap > 0.9 mm.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s): risk of ignition

• if heated

risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if inhaled.

• Acute toxicity estimate (ATE)

inhalation: vapour 11 $^{mg}/_{l}$/4h

• Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Fuels, diesel	68334-30-5	inhalation: vapour	11 $^{mg}/_{l}$/4h

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Fuels, diesel	68334-30-5	inhalation: vapour	LC50	3,6 $^{mg}/_{l}$/4h	rat
Renewable hydrocarbons (diesel type fraction)	928771-01-1	oral	LD50	>2.000 $^{mg}/_{kg}$	rat
Renewable hydrocarbons (diesel type fraction)	928771-01-1	dermal	LD50	>2.000 $^{mg}/_{kg}$	rat
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	oral	LD50	>5.000 $^{mg}/_{kg}$	rat
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	dermal	LD50	>2.000 $^{mg}/_{kg}$	rabbit

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Suspected of causing cancer.
Shall not be classified as germ cell mutagenic.
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity (STOT)

• Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

• Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

If swallowed. If inhaled. If in eyes. Following skin contact.

Symptoms related to the physical, chemical and toxicological characteristics

• If swallowed

diarrhoea - vomiting - severe abdominal pain

• If in eyes

localised redness - causes tears

• If inhaled

cough, pain, choking, and breathing difficulties - drowsiness - vertigo - severe headache - nausea - fatigue

• If on skin

has degreasing effect on the skin - localised redness

11.2 Information on other hazards

Data are not available.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Fuels, diesel	68334-30-5	LL50	>100 mg/l	fish	24 h
Fuels, diesel	68334-30-5	EL50	180 mg/l	aquatic invertebrates	24 h
Renewable hydrocarbons (diesel type fraction)	928771-01-1	LL50	>1.000 mg/l	fish	96 h
Renewable hydrocarbons (diesel type fraction)	928771-01-1	EL50	>100 mg/l	aquatic invertebrates	48 h
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	EC50	≥100.000 mg/l	fish	48 h
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	ErC50	73.729 mg/l	algae	72 h

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Fuels, diesel	68334-30-5	EL50	>1.000 mg/l	microorganisms	40 h
Renewable hydrocarbons (diesel type fraction)	928771-01-1	EL50	>100 mg/l	aquatic invertebrates	21 d
Renewable hydrocarbons (diesel type fraction)	928771-01-1	EC50	>1.000 mg/l	microorganisms	30 min
Renewable hydrocarbons (diesel type fraction)	928771-01-1	LOEC	3,2 mg/l	aquatic invertebrates	21 d
Renewable hydrocarbons (diesel type fraction)	928771-01-1	NOEC	1 mg/l	aquatic invertebrates	21 d

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Fuels, diesel	68334-30-5	oxygen depletion	57,5 %	28 d
Renewable hydrocarbons (diesel type fraction)	928771-01-1	carbon dioxide generation	82 %	28 d

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Renewable hydrocarbons (diesel type fraction)	928771-01-1	>3,2 – ≤1.950	>6,5 (pH value: ~7, 30 °C)	
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	3	>6,2 (pH value: ~6, 22 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

The water creates a continuous layer on the surface that prevents access to oxygen. It does not contain ozone-depleting substances based on the Montreal Protocol and its Copenhagen amendment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents / container in accordance with national regulations.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

13 07 01*. Fuel oil and diesel.
07 01 04*. Other organic solvents, washing liquids and mother liquors.
16 03 05*. Organic wastes containing hazardous substances.
15 02 02*. Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances.
17 05 03*. Soil and stones containing hazardous substances.
According to the European Waste Catalog (EWC), waste code numbers are application-related and not product-related. Waste key numbers should be issued by the consumer, if possible in consultation with the waste disposal authorities.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number or ID number**	**1202**
14.2	**UN proper shipping name**	**DIESEL FUEL** ENGINE OIL compliant with EN 590 standard
14.3	**Transport hazard class(es)**	
	Class	3 (flammable liquids)
14.4	**Packing group**	III (substance presenting low danger)
14.5	**Environmental hazards**	hazardous to the aquatic environment:

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

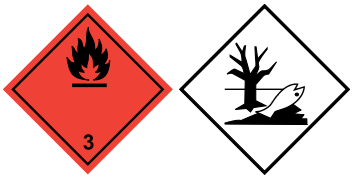
14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

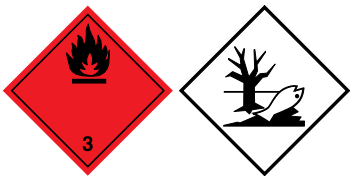
UN number	1202
Proper shipping name	DIESEL FUEL ENGINE OIL compliant with EN 590 standard
Class	3
Classification code	F1
Packing group	III
Danger label(s)	3 + "fish and tree"



Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	640L, 664
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	D/E
Hazard identification No	30

• International Maritime Dangerous Goods Code (IMDG)

UN number	1202
Proper shipping name	DIESEL FUEL ENGINE OIL compliant with EN 590 standard
Class	3
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3 + "fish and tree"



Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E
Stowage category	A

• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1202
Proper shipping name	Diesel fuel ENGINE OIL compliant with EN 590 standard
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

• Restrictions according to REACH, Annex XVII

None of the restrictions apply to the identified use of the product.

• List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

• Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content 100 %

• Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

• Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

• Water Framework Directive (WFD)

Name of substance	Listed in
Fuels, diesel	a)

Legend
A) Indicative list of the main pollutants

National inventories

Country	Inventory	Status
EU	REACH Reg.	all ingredients are listed

Legend
REACH Reg. REACH registered substances

15.2 Chemical Safety Assessment

A chemical safety assessment has been carried out.
Exposure scenarios: Based on information from the manufacturer/supplier of the SDS (UNIPETROL RPA, s.r.o.,), the information resulting from the consolidation of the various exposure scenarios for the substances used in the mixture was included in the main sections 1-16 of the safety data sheet.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand

Abbr.	Descriptions of used abbreviations
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin

Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
STOT RE	Specific target organ toxicity - repeated exposure
SVHC	Substance of Very High Concern
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

- According to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- The original safety data sheet from the manufacturer of the mixture

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
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 through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.