

in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 - Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

SECTION 1. IDENTIFICATION OF A SUBSTANCE/MIXTURE AND COMPANY/PLANT

1.1. Product Identifier

• Commercial name: Extra Light Fuel Oil

• Other names: TOEL, ETO, Fuel Diesel, Very Light Fuel Oil

• UFI code: R800-A0KK-C003-TN7A (registered to PCN)

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Intended uses

Extra light fuel oil is mainly used as a heating medium in particularly ecologically polluted and protected areas. It may only be used in an approved facility and in accordance with the relevant operating documentation and applicable legislation.

1.2.2. Uses advised against

Extra light fuel oil must not be used for purposes other than heating.

1.3. Details of the Supplier of the Safety Data Sheet

1.3.1. Commercial Name and Identification Number ORLEN Unipetrol RPA s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic

Identification No.: 275 97 075

: +420 476 161 111

Fax: +420 476 619 553

unipetrolrpa@orlenunipetrol.cz

www.orlenunipetrolrpa.cz

1.3.2. Place of business Litvínov Rafinery Záluží 1

436 01 Litvinov Tel.: +420 476 163 567 Fax: +420 476 165 086 Kralupy Rafinery
O. Wichterleho 809
278 01 Kralupy n/Vlt.
+420 315 718 500
+420 315 718 640

1.3.3. Email Address of the Professionally Qualified Person Responsible for the Safety Data Sheet: reach.unirpa@orlenunipetrol.cz

1.4. Emergency Telephone Number

• Controlroom of ORLEN Unipetrol RPA s.r.o.

Toxicological information centre (TIS)
 Na bojišti 1, 120 00 Prague 2, Czech Republic email: tis@vfn.cz

• Transport Information and Emergency System (TIES)

2: +420 476 163 111 (NON STOP)

*****: +420 224 919 293 (NON STOP)

: +420 224 915 402 (NON STOP)

*****: +420 476 163 111 (NON STOP)

Note: Emergency telephone numbers for EU countries are listed in Section 16

Page: 1/17



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9 original edition: 10/12/1999

SECTION 2. HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

The product is classified as hazardous in the sense of Regulation (EC) No. 1272/2008 CLP:

FLAMMABLE LIQUID AND VAPOURS, CATEGORY 3; H226

INHALATION HAZARD, CATEGORY 1; H304

ACUTE TOXICITY, CATEGORY 4; H332

CAUSTICITY/IRRITANT EFFECT, CATEGORY 2; H315

CARCINOGENICITY, CATEGORY 2; H351

TOXICITY FOR SPECIFIC TARGET ORGANS

(REPEATED EXPOSURE), CATEGORY 2; H373

TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS, CATEGORY 2;

H411

Flam. liq. 3, H226
Asp. Tox. 1, H304
Acute Tox. 4, H332
Skin irit. 2 , H315
Carc. 2, H351
STOT Rep Exp. 2, H373

Aquatic Chronic 2, H411, GHS09

Notice: The full text of the H-statements marked with a code is given in Section 2.2.

2.2. Label Elements

product identifiers		EXTRA LIGHT FUEL OIL NM-B, NM-D, NM-F, NM-2 (ARCTIC DIESEL) index number:	
hazard warning syn	nbol		
signal word		DANGER	
H-statements	H226	Flammable liquid and vapours	
(standard hazard	H304	Ingesting and penetrating the respiratory tract may cause death	
statements)	H315	Irritates the skin	
	H332	Harmful if inhaling	
	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.	
P-precautions	P261	Avoid breathing vapours	
(precautions for	P273	Avoid release to the environment.	
safe handling)	P280	Wear protective gloves / protective clothing / goggles / face shield.	
	P301+P310	IN CASE OF INGESTION: Immediately call a TOXICOLOGICAL	
	P331	INFORMATION CENTRE / physician /	
	P332+P313	DO NOT INDUCE vomiting.	
	P501	If skin irritation occurs: Get medical advice/attention.	
		Dispose of the packaging in accordance with applicable legislation	
General instruction	s for placing the	P101 If medical aid is needed, have product container or label at hand	
	<i>y</i> 1	P102 Keep out of reach of children	
product on the consumer market		P103 Read data on the label before use	
		ORLEN Unipetrol RPA s.r.o.	
		Záluží 1, 436 70 Litvínov, Czech Republic	
		2 : +420 476 161 111, +420 476 163 111	



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

2.3. Other Hazards

Information on whether a substance or mixture meets the criteria for PBT or vPvB is provided in Subsection 12.5.

Extra light fuel oil is a complex mixture of hydrocarbons boiling in the range of about 180 to 370 °C with a content of polycyclic aromatic hydrocarbons up to 8% m/m. Due to low viscosity, extra light fuel oil, upon ingestion may cause lung damage. Locally degreases and irritates skin. Its vapours may have a narcotic effect, cause headaches, nausea, eye irritation and respiratory tract irritation. They form an explosive mixture with air. The product may accumulate static electricity.

None of the components of the mixture (substance) is included in the Candidate List under Article 59 (1) of the REACH due to endocrine disrupting properties.

The meaning of abbreviations used in this section is given in Section 16.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

It is a mixture of substances

3.2. Mixtures

NAME	REGISTRATION NUMBER INDEX NUMBER	CAS NUMBER ES NUMBER	CONTE NT [% wt]	CLP CLASSIFICAT ION
Fuels, diesel oil	01-2119484664-27-0113 649-224-00-6	68334-30-5 269-822-7	60 - 100	Flam. liq. 3, H226, GHS02, Wng Asp. Tox. 1, H304, GHS08, Dgr Acute Tox. 4, H332, GHS07, Wng Skin irit. 2, H315, GHS 07, Wng Carc. 2, H351, GHS08, Dgr STOT Rep Exp. 2, H373, GHS08, Wng Aquatic Chronic 2, H411, GHS09
Fatty acid methyl esters (FAME)	01-2119471664-32-xxxx -	67762-38-3 267-015-4	0 - 7	-
Renewable hydrocarbons (diesel type fraction) (HVO)	01-2119450077-42-xxxx	928771-01-1 618-882-6	0 - 40	Asp. Tox. 1, H304, GHS08, Dgr

NOTICE: To improve the performance properties, extra light fuel oil may contain suitable additives –

additives to modify the performance properties, such as additives to improve low-temperature properties, lubricating additives, corrosion inhibitors, detergents, etc., in concentrations of the order of max. 0.1~% (m/m). Extra light fuel oil must contain dyes and

marking substances in accordance with applicable legislation.

NOTE 2: None of the components of the mixture contain nanoform

SECTION 4. FIRST AID MEASURES

4.1. Description of First Aid Measures

4.1.1. General instructions

When providing first aid, take care of your own safety.

Call medical first aid (\$\mathbb{2}\$ 155 CZ, \$\mathbb{2}\$ 120 EU) and follow its instructions until they arrive. Ensure the activity of vital functions. If the affected person is not breathing normally even after the head has been



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

tightened, perform resuscitation by compressing the chest to a depth of about 5cm at a frequency of 100 – 120 per minute. If you are trained in artificial respiration, carry out 2 breaths after every 30 chest compressions. Do not stop the heart massage until the rescue service arrives.

If the person is unconscious or if he/she has spasms, do not administer anything in his/her mouth, just place him/her in a stabilised position.

4.1.2. If you inhale

Transport the affected person to fresh air, do not let him/her get chilled and get professional medical advice.

4.1.3. If in contact with skin

Remove the contaminated clothing and footwear. Wash the affected areas thoroughly with water (preferably lukewarm) and soap. In the case of persistent symptoms of irritation, seek professional medical attention.

When burning, do not remove the product, cover the affected area with a sterile dressing (possibly with a clean cloth) and immediately ensure professional medical attention.

4.1.4. If eyes are affected

Immediately rinse eyes with running water, open eyelids (even by force); if the affected person has the contact lenses, remove them immediately. Ensure medical treatment.

4.1.5. After ingestion

DO NOT INDUCE VOMITING! If the affected person vomits himself/herself, keep his/her head below the level of his/her hips to avoid aspiring vomits. Get professional medical attention as soon as possible.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Depending on the size of the exposure, the substance may cause headaches, nausea, dizziness, difficulty in breathing, pulmonary arrest, convulsions and unconsciousness. In case of ingestion, spontaneous vomiting may occur, with the risk of lung penetration (aspiration) and the occurrence of pulmonary oedema (chemical pneumonia), which may cause death. Direct eye or skin contact may cause their transient irritation. Longer skin exposure to the substance may cause skin degreasing.

4.3. Instruction of Any Immediate Medical Attention and Special Treatment Needed

In case of eye contact, ingestion and/or penetrating the respiratory tract, immediate medical attention is required.

SECTION 5. FIRE FIGHTING MEASURES

5.1. Extinguishing agents

Appropriate extinguishing agents: Air extinguishing foam, extinguishing powder, CO2.

Inappropriate extinguishing agents: direct water jet.

Small fire extinguishing: powder or foam fire extinguisher, dry sand or extinguishing foam.

5.2. Special Hazards Arising from the Substance or Mixture

Vapours are heavier than air, therefore they accumulate and spread over the ground, and may cause, even at a greater distance from the source of leakage, a reverse flare with a subsequent explosion and/or fire after initiation. This risk particularly threatens in the areas below the ground level or in confined spaces. During combustion toxic and irritable smoke may create containing carbon monoxide and unburnt hydrocarbons.

5.3. Advice for Fire Fighters

Minimise the penetration of the extinguishing agent contaminated by the substance into the sewer system, surface and ground water and into soil.

Spray tanks with the substance with water because they may explode due to heat.

Do not use foam and water at the same time because water decomposes foam.

Protective equipment for fire fighters: complete protective suit and insulating breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Close the place of the accident and prevent access to the threatened area. Stay on the windward side. If this product leaks, there is a risk of fire and therefore remove all possible sources of ignition, do not smoke



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

and do not handle open fire. If possible, ensure adequate ventilation of closed space. Avoid contact with the substance and its vapours. When disposing of the consequences of an emergency/accident, use all recommended personal protective equipment (see Subsection 8.2). In case of major accidents, evacuate persons from the entire endangered area. In the premises below the level of the ground and in the closed premises (including the sewerage system) there is a risk of explosion of substance vapours in the event of initiation.

6.2. Environmental Precautions

Prevent further leakage of the substance and enclose the place of leak. Avoid penetration of the substance into the sewerage system, surface and underground water by covering sewerage riggots. Avoid penetration of the substance into soil.

6.3. Methods and Material for Containment and Cleaning Up

If this product leaks, there is a risk of fire, so use explosion-proof lights and electrical equipment and non-sparking tools. Sorb the leaked product in a suitable non-flammable porous/absorbent material (e.g. sand, soil, kieselguhr, vermiculite) and transport in closed containers for disposal. Dispose of in accordance with the applicable waste management legislation (see Section 13).

In the event of a large leakage of the product into water, use the containment boom and collect the substance from the surface using surface collectors (separators) or fill the leaked substance with a sorbent and remove the saturated sorbent from the surface by stockpiling or draining. Consult a specialist before using any dispersed agents, if any.

6.4. Reference to Other Sections

For recommended personal protective equipment, see Subsection 8.2 ("Exposure limitation"). Refer to Section 13 ("Removal instructions") for the recommended waste disposal method.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Handle the substance as well as empty tanks (may contain product residues) in well-ventilated premises and adhere to all fire precautions (smoking bans, ban of work on open flame, removal of all possible sources of ignition). Do not carry out activities such as welding, cutting, grinding, etc. in the proximity of packagings (even empty). Do not use compressed air for filling, emptying or another handling. Prevent static electricity discharges.

General sanitary measures: Observe the rules of personal hygiene. Immediately take off the contaminated parts of clothing. During work refrain from eating, drinking and smoking! After work and before eating or drinking, thoroughly wash your hands and uncovered parts of the body with water and soap, or treat with a suitable repairing cream. Do not place contaminated clothing, footwear and protective equipment in the eating room.

7.2. Conditions for Safe Storage of Substances and Mixtures, Including Any Incompatible Substances and Mixtures

Storage places need to comply with fire safety requirements of buildings and electrical equipment need to comply with applicable regulations. Store in a cool, well-ventilated place with efficient extraction, away from sources of heat and ignition sources. Storage containers must be sealed and properly labelled and grounded. Soft or stainless steel is recommended to be suitable materials for packaging. Do not store near incompatible materials such as oxidising agents (oxygen, air, etc.) or other flammable materials.

7.3. Specific End Use

Extra light fuel oil is mainly used as a heating medium in particularly ecologically polluted and protected areas. It may only be used in an approved facility and in accordance with the relevant operating documentation and applicable legislation. It contains does and marking substances in accordance with applicable legislation. It must not be used as a motor fuel, cleaning agent, for lighting, heating or for lighting fire. Never pour out into a sewerage system.

Page: 5/17



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878 Valid Edition: 24/04/2023 - Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

SECTION 8. LIMITING EXPOSITION / PERSONAL PROTECTIVE DEVICES

8.1. Control Parameters

8.1.1. Exposure limit values at the workplace

The following permissible exposure limits (PELs) and maximum allowable concentrations (NPV-P) of chemicals in the air at workplaces within the Czech Republic are set by Government Regulation No. 361/2007 Coll., laying down the conditions for occupational safety, as amended:

Name	CAS code	PEL [mg.m ⁻³]	NPK-P [mg.m ⁻³]	Note
Diesel		200	1000	
Diesei	-			

Note 1: The explanation of the meaning of the PEL and NPK-P abbreviations is in Section 16. Note 2: Exposure limit values at workplaces for EU countries are given in Section 16.

8.1.2. DNEL/DMEL values

DNEL values used for evaluation:

DNEL (dermal route of exposure): 1,300 µg/kg/day

DNEL (inhalation route of exposure): 5,714 µg/kg/day or 19.99 mg/m3

PNEC (secondary exposure, oral): 8.77 mg/kg

Note: The explanation of the meaning of the DNEL/DMEL abbreviations is provided in Section 16.

8.1.3. PNEC PNEC values

(secondary exposure, oral): 8.77 mg/kg Note: The explanation of the meaning of the DNEL/DMEL abbreviations is provided in Section 16.

Derivation of specific PNEC values based on experimental data obtained by testing the modified aqueous fraction containing dissolved/emulsified/suspended shares of the tested substance (WAF - "Water accommodated Fraction") for UVCB substances of the hydrocarbon type is not suitable. The characterisation of the product risk for the environment was therefore determined by the statistical carbon block method of extrapolation of HC5 using the PETROTOX v.3.05 model.

8.1.4. Recommended procedure for observing concentrations in the work environment Recommended procedure for observing concentrations in the work environment: gas chromatography (GC) with a flame ionisation detector (FID) or a mass spectrometric detector (MS) in accordance with the technical standards ČSN EN 689 and ČSN EN 482.

8.2. Exposure Limitations

8.2.1. Technical protective measures to limit exposure of persons and the environment

Protection against unwanted exposure of persons and the environment must be ensured by strict keeping the substance under control by technical means and by using process and control technologies which reduce emissions and subsequent exposure in order to prevent the release of substance vapours into the ambient air and the penetration of the substance into the aquatic environment and into the soil and the eventual exposure of persons. Areas where the substance is handled or stored shall be provided with impermeable floors and containment tanks in case of accidental leakage of the substance. It is essential to provide total and local ventilation and efficient suction.

8.2.2. Individual protection measures Individual protection measures

In case of risk of increased exposure during handling the product or an increase in exposure, e.g. due to an accident or an emergency, workers must have at their disposal personal protective equipment (PPE) for the protection of the respiratory tract, eyes, hands and skin, which correspond to the nature of the activities carried out. Appropriate respiratory protection must also be provided where it is not possible to ensure compliance with the occupational exposure limits by technical means or to ensure that exposure to the respiratory system does not endanger human health. Continuous use of this equipment for permanent work requires safety breaks if the nature of the PPE requires so. All PPE must be continuously kept in a usable condition and replaced immediately if damaged or contaminated.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

(specific type of protective equipment must be chosen in accordance with the type of activity being carried out and the quantity and concentration of the hazardous substance/mixture at the workplace)



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 - Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

• respiratory protection: in the case of insufficient ventilation and/or local extraction and for

leakage, a protective mask complying with EN 143 with an organic vapour-resistant filter; an insulating respiratory apparatus for the

removal of the consequences of an emergency/accident;

• eye/face protection: protective glasses complying with EN 166;

• hand protection: chemically resistant gloves tested in accordance with EN 374, for

instance the following materials are suitable:

	gloves material	layer thickness	penetration time
ordinary working activity (possibility of splashes)	natural latex	1mm	120 minutes
leakage/crash disposal	nitrile	0.4 mm	480 minutes

• Protection of Other Body Parts: antistatic flame-proof protective clothing, antistatic

footwear;

• *thermal hazard:* is not relevant at the designated way of use.

• *other measures*: we recommend that the workplace be equipped with a safety shower

and a device for eye washing.

8.2.3. Limitation of the environment exposure

Avoid product leakage to the environment with all available means. See Section 6.4

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

The information is taken from the registration documentation unless otherwise stated.

attribute	unit	value	source/method	note
state of matter		liquid	CSR	at 20°C
colour		colorless, slightly yellowish to yellow or with greenish opalescence		
odour		typical petroleum		
melting point / freezing point	[°C]	-40 - +6	CSR	
initial boiling point / boiling point range	[°C]	141-462	CSR	influence of variable composition of UVCB
flammability		the mixture is flammable	CSR	
upper explosive limit	%	6,5	GESTIS	
lower explosive limit	%	0,6	GESTIS	
flash point	[°C]	>56	CSR	



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 -Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

attribute	unit	value	source/method	note
spontaneous ignition temperature	[°C]	>225	CSR	
decomposition temperature		does not decompose at normal operating temperatures		CSR does not state
рН		not relevant (non- polar substances)		CSR does not state
viscosity kinematic	[mm ² .s ⁻¹]	≥1,5	CSR	40°C
solubility in water	[mg.l ⁻¹]	slight	CSR	
relative density	water=1	0,8-0,91	CSR	at 15°C
distributive coefficient: n- octanol/water	[log Koc]	1,71 – 14,7	CSR	
vapour pressure	[kPa]	0,4	CSR	at 40°C
relative vapour density	air=1	3,5	American Petroleum Institute (API)	CSR does not state
particle characteristics		-		not applicable - it is a liquid

9.2. Additional Information

9.2.1. Information concerning physical hazard classes Extremely flammable liquid

9.2.2. Other safety characteristics Not available.

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

The product is stable under normal conditions.

10.2. Chemical Stability

The product is stable under normal conditions.

10.3. Possibility of Hazardous Chemical Reactions

When burning in the absence of air, carbon monoxide may be released.

10.4. Conditions to Avoid

Creation of concentrations within limits of explosiveness, presence of ignition sources, contact with open fire.

10.5. Incompatible Materials

Oxidisers.



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 – Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9 original edition: 10/12/1999

10.6. Hazardous Decomposition Products

None under normal conditions, carbon monoxide and carbon black may be produced in the event of combustion in the absence of air.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

11.1.1. Toxicological effects of the substance/mixture

HAZARD CLASS	DATA FROM THE REGIS	EVALUATION	
HAZAKD CLASS	DESCRIPTION	RESULT	EVALUATION
Acute toxicity	oral (OECD 401): inhalation (OECD 403): dermal (OECD 404):	$LD_{50} = 17900 \text{ mg/kg}$ $LC_{50} = 4100 \text{ mg/m}^3$ $LD_{50} = 4300 \text{ mg/kg}$	meets the criteria for classification
Causticity / skin irritation	tests of product and included components (OECD 404)	2.96	meets the criteria for classification
Serious eye damage/irritation	tests of product and included components (OECD 405)	-	does not meet the criteria for classification
Sensitisation	tests of product and included components (OECD 406)	product or its components do not cause allergic reactions	does not meet the criteria for classification
Germ cell mutagenicity	OECD 476	based on the ingredients content, the substance is not considered to be suspected of reproductive toxicity.	does not meet the criteria for classification
Carcinogenicity	tests	The inclusion is in accordance with the harmonised classification assigned to the majority of members of this category, as set out in Annex VI to the Regulation.	meets the criteria for classification
Toxicity for reproduction	1/ fertility: 2/ prenatal developmental toxicity:	There are no available data indicating that the substance is toxic for reproduction	does not meet the criteria for classification
STOT – one-time exposure	acute toxicity tests (oral, dermal, inhalation)	there were no toxic effects during tests	does not meet the criteria for classification
STOT – repeated exposure	1/ oral: 2/ inhalation: 3/ dermal	Diesel oil components can cause systemic changes after repeated skin exposure	meets the criteria for classification
Aspiration hazard		at a kinematic viscosity below 20.5 mm²/s (40 °C) when the product is ingested and penetrates the respiratory tract, it causes lung damage and may cause the death	

11.1.2. Information on likely exposure routes

Exposure may occur by inhalation, by accidental ingestion and by penetration of the product components through skin.

11.1.3. Symptoms and effects (acute, delayed and chronic after short-term and long-term exposure) Depending on the size of exposure, the substance may cause headache, sore throat, cough, difficulty in breathing, chest pressure, central nervous system function disturbance, nausea, drowsiness and dizziness. In case of ingestion, it may cause abdominal cramps, spontaneous vomiting or diarrhoea. Direct contact with the eyes or the skin may cause transient irritation with redness or swelling of the affected area, lacrimation, redness and swelling of the eyes. Longer skin exposure to the substance may cause skin



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

degreasing and chapping. The substance can cause or promote the onset of cancer in persons. When handling a hot (heated) product, burns can occur, which usually result in pain and redness of the skin or creation of blisters, in the worse case.

11.1.4. Interactive effects

There are no interactions with the designated use.

11.2. Information on other hazards

None of the components of the mixture is not included in the Candidate List under Article 59 (1) of the REACH (due to endocrine disrupting properties or for any other reason).

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

aqueous environment	fish	LL ₅₀ (96h, fish) = 21.0 mg/l	
	invertebrates	EL_{50} (48h, invertebrates) = 68.0	Daphnia magna
		mg/l	
	algae	EL_{50} (72h, algae) = 22.0 mg/l	
Microbiological activity (WWTP)	activated sludge	The substance is a UVCB hydrocarbon. Stand for individual substances and are not suitable this complex substance. For the purposes of PNECs for sediments at hydrocarbons were PNECs and the equilibrium distribution (representative structures.	for risk assessment of risk assessment, the derived using water

Note: The explanation of the meaning of the EL50 and LL50 abbreviations is provided in Section 16.

12.2. Persistence and Decomposability

The evaluation of representative hydrocarbon structures indicates some structures that can meet the P or vP criteria.

Biodegradability in accordance with CEC approx. 50 - 60%. Due to the complex composition of this substance, it is not possible to estimate its potential biodegradability using quantitative models of relations between the structure and biodegradability.

12.3. Bioaccumulation Potential

The evaluation of representative hydrocarbon structures indicates some structures that can meet B criteria, but none that could meet the vB criteria.

12.4. Mobility in Soil

For components contained in the product, the log Koc value, which ranges from 1.71 to 14.70, was calculated.

12.5. Results of PBT and vPvB Assessment

It is not appropriate to compare this UVCB hydrocarbon substance with the criteria in accordance with Annex XIII to Regulation (EC) No 1907/2006 REACH as a whole. Consequently, the assessment of the contained components was carried out, concluding that the product fulfils the T criterion (toxic) but it does not meet the criteria of persistence and bioaccumulation nor the high persistence and high bioaccumulation in accordance with Annex XIII to Regulation (EC) No. 1907/2006 REACH and is therefore not identified as a PBT substance (P-persistent, B-bioaccumulative, T-toxic) and as a vPvB substance (vP-highly persistent, vB-highly bioaccumulative).

12.6. Endocrine disrupting properties

None of the components of the mixture is included in the Candidate List under Article 59 (1) of the REACH due to endocrine disrupting properties.

12.7. Other Adverse Effects

On the water surface, it forms a coherent oxygen-prevents layer. The product is for the purposes of Water Act No. 254/2001 Coll. considered a hazardous harmful substance.

It does not contain ozone-depleting substances under the Montreal Protocol and its Copenhagen Amendment.



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 - Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

SECTION 13. INSTRUCTIONS FOR DISPOSAL

13.1. Waste Management Methods

If the rest of the product (e.g. unused or leaked product) has to be removed, the applicable European Union legislation and national and local regulations need to be observed. Hand over the waste for disposal to a professionally qualified person with the appropriate authorisation.

Recommended waste classification in accordance with Decree No. 93/2016 Coll. (Waste catalogue)

13.1.1. Catalogue number

Catalogue number for the product that has become waste:

13 07 01* Fuel oil and diesel fuel

07 01 04* Other organic solvents, washing liquids and mother liquors.

16 03 05* Inorganic waste containing hazardous substances

Catalogue number for leaked product sorbed to sorbent agent (e.g. vapex):

15 02 02* Absorbent agent, filtration materials (including oil filters not specified closer), cleaning cloths and protection clothes contaminated by hazardous substances.

Catalogue number for soil contaminated by leaked product:

17 05 03* Soil and stones containing hazardous substances.

13.1.2. Recommended method of waste disposal

Hand over the unusable product residue to a professionally qualified person with the appropriate authorisation. Recommended method of disposal: Energetic use (combustion).

13.1.3. Methods of substance disposal

The disposal of waste and unused residue is carried out in accordance with the applicable waste legislation, usually by incineration in incineration plants designated for that purpose. Landfilling is an inappropriate method.

13.1.4. Methods of disposal of contaminated containers

Extra light fuel oil is usually delivered in railway or road tank wagons. Decontamination and disposal of these packages is governed by the applicable ADR/RID regulations.

NOTICE: the stated information relates to the supplied, already unused material. In the event when the material already used becomes a waste, it is on the waste producer to assign it a code in accordance with the industry and the process of use and to determine the method of its disposal.

SECTION 14. TRANSPORT INFORMATION

14.1. Number UN or ID number

1202

14.2. Official (UN) Designation for Transport

FUEL OIL, LIGHT

14.3. Class/Classes of Transport Hazard

3

14.4. Package Group

III

14.5. Environmental Hazards

ENVIRONMENTALLY HAZARDOUS ENVIRONMENTALLY HAZARDOUS

14.6. Special Precautions for the User

None.

14.7. Maritime bulk transport according to IMO instruments

N/A The product is transported in railway tank wagons, road tank wagons or pipelines.







in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

14.8. Additional Information

Hazard number 30 Classification code: F1 Safety mark: 3

SECTION 15. REGULATORY INFORMATION

15.1. Regulations Relating to the Safety, Health and Environment / Specific Legislation for the Substance or Mixture

15.1.1. European Union

Regulation (EC) No. 1907/2006 (REACH) of the European Parliament and the Council, as amended REGISTRATION (CHAPTER II OF THE REACH REGULATION):

product ingredients have been fully registered as a substanceAUTHORISATION (CHAPTER VII OF REACH REGULATION)

the ingredients of the product are not listed in Annex XIV to Regulation (EC) No. 1907/2006 REACH and, therefore, they are not subject to the obligation of authorisationLIMITATION (CHAPTER VIII OF THE REACH REGULATION):

the product may not be placed on the market for sale to the public, with the exception of cosmetic products, pharmaceuticals and fuels as defined in detail in Record No. 28 of Annex XVII to Regulation (EC) No. 1907/2006 REACH

Regulation (EC) No. 1272/2008 (CLP) of the European Parliament and the Council, as amended the product has been classified in accordance with the stated regulation; the requirements connected with the packaging and labelling of dangerous chemicals only apply to the product if it is marketed in packagings liable to the duty of their identification in accordance with the CLP Regulation

Regulation (EU) 2017/542 of the European Parliament and of the Council - Annex VIII. (CLP) - harmonized information on responding to health threats.

The required information on the hazardous mixture was provided via the ECHA Submission Portal - Poison Centers (PCN).

Regulation (EC) No. 649/2012 of the European Parliament and the Council, on the Export and Import of Hazardous Chemicals, as amended

the product is not subject to special export and import restrictions

15.1.2. Czech Republic

Act No. 350/2011 Coll. on Chemicals and Chemical Mixtures, as amended

Act No. 258/2000 Coll., on Public Health Protection, as amended

Act No. 254/2001 Coll., on Waters, as amended

Act No. 201/2012 Coll., on Air Protection, as amended

Act No. 541/2020 Coll., on Waste, as amended

Decree No. 93/2016 Coll., on the Waste Catalogue, as amended

Government Regulation No. 361/2007 Coll., which stipulates conditions of health protection at work, as amended

Act No. 224/2015 Coll., on Prevention of Major Accidents Caused by Selected Hazardous Chemicals or Mixtures, as amended

15.2. Chemical Safety Assessment

Chemical safety assessment was carried out when the substance was registered. The substance meets the criteria for classification as hazardous in accordance with Regulation (EC) No. 1272/2008 CLP. The exposure assessment and the subsequent step of risk characterisation were performed.

Page: 12/17



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 – Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

SECTION 16. OTHER INFORMATION

Changes Made During the Revision

Changes in this version of the safety data sheet are indicated by a black and red vertical line to the left of the text. 24.4.2023 In section 9, the term "ignition point" was replaced by the term "flash point".

Acronyms and abbreviations used in the text

ADR	European agreement on international road transport of hazardous items
CAS	The registration number assigned to the substance by the service "Chemical Abstracts
	Service" of "American Chemical Society"
CLP	Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Chemicals and Mixtures implementing the Globally Harmonised System of Classification and Labelling of Chemicals of the United Nations – GHS ("United Nations` Globally Harmonised System') in the European legislation
CMR	Carcinogenic, mutagenic or toxic for reproduction
ČSN EN (ISO)	European Standard incorporated into Czech Technical Standards
CSR	Chemical Safety Report
DMEL	A degree of exposure corresponding to a low and possibly theoretical risk, which should be considered as an acceptable risk (for non-threshold effects, i.e. there is no exposure level without effect)
DNEL	A degree of exposure derived from toxicological details at which no adverse effects on human health occur
DW	Data waiving
EC ₅₀	Effect concentration, which causes immobilisation of 50% of individuals
E1C ₅₀	Effect concentration, which causes a 50% decrease in the growth rate of algae
ECHA	European Chemicals Agency
EL50	Effective load speed required to immobilise 50%
ES	The official number of the chemical in the European Union: EINECS from the European Inventory of Existing Commercial Substances, or
	ELINCS from the European List of Notified Chemical Substances, or NLP from the List of Substances No Longer Considered as Polymers
HSDB	Hazardous Substances Data Bank
IATA	International Air Transport Association
IBC	International Regulation for the construction and equipment of ship transferring in bulk hazardous chemicals ("Intermediate Bulk Container")
IC ₅₀	Inhibition concentration that causes inhibition in 50% of individuals
ICAO	International Civil Aviation Organization
ICE	Intervention in Chemical Transport Emergencies Programme
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organisation
ISO	International Organisation for Standardisation
LC ₅₀ /LD ₅₀	Lethal concentration/level, which causes death of 50% of individuals
LL ₅₀	The rate of introduction of the tested substance that results in 50% mortality
LOEC/LOEL	Lowest Observed Effect Concentration / Level
log Koc	Logarithm of the coefficient of organic soil and water distribution
log Kow	Logarythm of the distributive coefficient n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships
nf	Not feasible
NOAEC/NOAEL	The highest no observed adverse effect level
NOEC/NOEL	The highest no observed effect concentration/level
NPK-P	The maximum permissible concentration of the chemical in the air (the concentration of the substance that can be exposed to the worker for a maximum of 15 minutes but which must never be exceeded)



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

 $Valid\ Edition:\ 24/04/2023\ -Version\ 10(1)$

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9 original edition: 10/12/1999

OECD	Organisation for Economic Co-operation and Development
PPE	Personal protective equipment
UN	United Nations
(Q)SAR	A theoretical mathematical model by which a quantitative structure-activity relationship can be derived on the basis of a relation between the structure and activity of the chemical
PBT, vPvB	Persistent, bioaccumulative and toxic, highly persistent and highly bioaccumulative
PEL	The admissible exposure limit of the chemical in the air (the exposure value that an employee may be exposed to during the entire working shift (8 hours), without endangering his health even during lifetime occupational exposure)
PNEC	Estimated concentration at which no hazardous effects occur in the respective environmental component
REACH	Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations for International Railway Transport of Hazardous Items
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
su	Scientifically unjustifiable
TPJNS	Transport Information and Emergency System
UACRON	Chemical Database (The University of Akron).
Number UN	The four-digit identification number of the substance or object taken from the UN Model Regulations
UVCB	Substances of Unknown or Variable composition, Complex Reaction Products or Biological Materials

Data Sources Used to Compile the Safety Data Sheet

Annexes I, IV, VI and VII to CLP Regulation (EC) No. 1272/2008, as amended Principles for providing first aid during exposure to chemicals (doc.MUDr.Daniela Pelclová et al.) Registration documentation of the substance in accordance with Regulation (EC) No. 1907/2006 REACH Decision of the European Agency for Chemicals ECHA No. SUB-D-2114173897-30-01/F on Registration in accordance with Regulation (EC) No. 1907/2006 REACH

The information evaluation method used to classify the mixture

The flammability of the mixture was assessed based on the measured flash point and boiling point range. Effects on health and the aquatic environment were assessed using the procedures set out in Annex I to the CLP Regulation for classification mixtures based on known information on the classification of the ingredients and the known content of the ingredients in the mixture.

Training Guidelines

Persons handling the product must be advised of the risks involved in handling and the health and environmental protection requirements (see the applicable provisions of the Labour Code).

Information Access

In accordance with Article 35 of Regulation (EC) No. 1907/2006 REACH, each employer must make the information from the safety data sheet available to all workers who use this product or who are exposed to its effects during their work, as well as to the workers' representatives.

Exposure Limit Values at the Workplace for EU Countries (see Section 8.1.1)

data for diesel oil (CAS number 68334-30-5)

Name	Country	8-hour limit [mg.m ⁻³]	short-term limit [mg.m ⁻³]
Diesel oil European Union (Dire 2000/39/EC)		Limit Values for the Subs Set	
	Hungarian		
	Germany		
	Poland		

8-hour limit: the measured or calculated value in relation to the eight-hour reference period as the time-weighted average



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

short-term limit: the limit value above which exposure should not occur and which corresponds to 15 minutes

Emergency Telephone Numbers for EU Countries (See Section 1.4)

National Centres	TOXICOLOGY	ICE (Information from SDS)	
(NON-STOP)	(First aid information)		
Belgium	≅ +32/70245245	Belintra	☎ +32/35699232
Bulgaria	≅ +359/29154378		
Croatia	≅ +385/12348342		
Czech Republic	☎ +420/224-919293; 915402	TRINS	☎ +420/47 6163111; 6163267
Denmark	≅ +45/82121212	PIBF/RVK	* +45/45906000
Estonia	☎ +372/6269379		
Finland	≅ +358/9471977		
France	☎ +33/(0)140054848	Transaid	☎ +33/298331010
Ireland	≅ +353/18092566		
Italy	☎ +39/063054343	SET	☎ +39/0362512868
Cyprus	☎ +357/1401		
Lithuania	☎ +370/52362052		
Latvia	☎ +371/67042473		
Luxemburg	☎ +32/70245245 (see Belgium)		
Hungary	☎ +36/80201199	VERIK	☎ +36/23552205
Malta	☎ +356/21450000		
Germany	≅ +49/3019240	TUIS	≅ +49/6216043333
The Netherlands	☎ +31/302748888	TRC	≅ +31/102468642



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 –Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

National Centres	TOXICOLOGY (First aid information) \$\mathrice{\mathrice	ICE		
(NON-STOP)		(Information from SDS)		
Poland		SPOT	≅ +48/243657032	
Portugal	≅ +351/808250143			
Austria	≅ +43/14064343	TUIS	☎ +49/6216043333	
Greece	≅ +30/2107793777			
Romania	≅ +40/212106282			
Slovakia	☎ +421/254774166	DINS	☎ +421/317754112; 2771	
Slovenia	☎ +386/41635500			
Spain	2 +34/915620420	CERET	☎ +34 915373 248; 238	
Sweden	≅ +46/(0)104566700	KEMIAKUTEN	≅ +46/8337043; 170970	
Great Britain	☎ 8448920111	Chemsafe	≅ +44/123 5836002; 5753363	

<u>Declaration:</u> The Safety Data Sheet has been prepared in accordance with Regulation (EC) No. 1907/2006 REACH. It contains details necessary to secure safety and protection of health at work and protection of the environment. These details have been stated in good will, correspond to the current state of knowledge and experience and are in accordance with our valid statutory provisions. The stated information does not substitute the quality specification and cannot be considered as a warranty of suitability and applicability of this product for a specific application. It is the responsibility of the product user to assess the accuracy of the information in a particular application where the product's properties can be influenced by different factors. The customer is responsible for compliance with local laws in force.



in accordance with Regulation (EC) No. 1907/2006 (REACH), as amended and Commission Regulation (EU) No 2020/878

Valid Edition: 24/04/2023 -Version 10(1)

revision: 28/02/2022 – Edition 10 replaces: 01/06/2018 – Edition 9

original edition: 10/12/1999

ANNEX TO THE SAFETY DATA SHEET EXPOSURE SCENARIOS IN ACCORDANCE WITH ARTICLE 31 OF REGULATION OF THE EUROPEAN PARLIAMENT AND THE COUNCIL NO. 1907/2006 (REACH)

It is a mixture. Based on Chapter 2.23.2 of the Guidance on the Creation of Safety Data Sheets, consolidated information from the exposure scenario resulting from the consolidation of the different exposure scenarios for the substances used in the mixture has been included in the main sections 1–16 of the safety data sheet.

Page: 17/17