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

1.1. Product identifier

Trade name: Gasoline Verva
Unique formulation identifier (UFI) of the mixture: 8500-F0YU-U003-TJJ5

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

Relevant identified uses: fuel.
Uses advised against: no other use is recommended.

1.3. Details of the supplier of the safety data sheet

Manufacturer:
Public Company *ORLEN Lietuva*
Juodeikiai, LT-89453 Mažeikiai District, Lithuania
Tel.: +370 443 92121
E-mail address: post@orlenlietuva.lt

1.4. Emergency telephone number

Poison Information Bureau. In case of poisoning (24/7): +370 52 362052 or +370 687 53378
General helpline number in Europe (24/7): 112

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)
Flam. Liq. 1, H224
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336 (Organs affected: central nervous system. Route of exposure: inhalation)
Muta. 1B, H340
Carc. 1B, H350
Repr. 2, H361 (Specific effect: fertility and unborn child)
Aquatic Chronic 2, H411
For the full text of Hazard Statements: see SECTION 16.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)
Signal word: DANGER
Hazard pictogram:

GHS02 GHS08 GHS07 GHS09

Hazard Statements:
H224: Extremely flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child. Suspected of damaging fertility and the unborn child, when inhaled.
H411: Toxic to aquatic life with long lasting effects.
Precautionary statements:

P201: Obtain special instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

Does not contain any substances assessed to be a PBT or a vPvB or having endocrine disrupting properties with concentration equal to or greater than 0.1%.
Product is extremely flammable liquid which may generate explosive mixtures of hydrocarbon vapours and air at ambient temperatures.
Vapour is irritating to skin, eyes and respiratory tract. Splashes of liquid product irritate eyes and skin. Product may contain up to 1% vol. of benzene which is classified as carcinogen of 2nd category, therefore long-term exposure may cause cancer, anaemia, leukaemia and other diseases. Vapours inhaled may induce drowsiness and dizziness.
Toxic to aquatic organisms. May cause long-term adverse effects to aquatic environment. Risk of soil and ground water contamination.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Trade name: Gasoline Verva

Substance Name	Concentration, %	Labelling according to CLP Regulation
Gasoline EC No.: 289-220-8 CAS No.: 86290-81-5 Index No.: 649-378-00-4 REACH Registration No.: 01-2119471335-39-0027	Up to 100	Flam. Liq. 1, H224 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 (Organs affected: central nervous system. Route of exposure: inhalation) Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 (Specific effect: fertility and unborn child) Aquatic Chronic 2, H411
Bio-components:		
MTBE EC No.: 216-653-1 CAS No.: 1634-04-4	0–22	Flam. Liquid 2, H225 Skin Irrit. 2, H315
Ethanol EC Nr.: 200-578-6 CAS Nr.: 64-17-5	0–10	Flam. Liquid 2, H225 Eye Irrit. 2, H319
Methanol EC Nr.: 200-659-6 CAS Nr.: 67-56-1	0–3	Flam. Liquid 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (Optic nerve (nervus opticus), central nervous system)

Multifunctional additive	0.045	Skin Irrit. 2, H315 STOT RE 1, H372 (Central nervous system) Aquatic Chronic 3, H412
Other additives	0–0.05	

Contains substances for which workplace exposure limit value is established.
Occupational exposure limits, if available, are listed in SECTION 8.
For full text of H-statements, see SECTION 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply.
Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces.
Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the casualty is unconscious and:
- Not breathing – ensure that there is no obstruction to breathing and give artificial respiration by trained personnel. If necessary, give external cardiac massage and obtain medical assistance.
- Breathing – place in the recovery position and keep the head below the level of the torso. Administer oxygen if necessary.

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

Skin Contact

Immediately remove contaminated clothing and footwear and dispose of safely. Wash affected area thoroughly with soap and water. Seek medical attention if skin irritation, swelling or redness develops and persists.
When using high-pressure equipment, injection of product can occur. If high-pressure injuries occur, immediately seek professional medical attention. Do not wait for symptoms to develop.
For minor thermal burns: Cool the burn. Hold the burned area under cold running water for at least five minutes, or until the pain subsides. However, body hypothermia must be avoided.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

Ingestion

The casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Do not induce vomiting, as there is high risk of aspiration (chemical pneumonia). Gastric lavage should be undertaken only after endotracheal intubation.
Do not give anything by mouth to an unconscious person.

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

Inhalation may cause: headache, nausea, dizziness, vomiting and an altered state of consciousness. Acute, high dose exposure may cause: central nervous system depression, confusion, altered mental status, seizures, cardiac arrhythmias.
Skin Contact – reddening, irritation.
Eye Contact – May cause mild reversible eye irritation.

Ingestion – few or no symptoms expected. If any, nausea and diarrhoea might occur. In case of ingestion, always assume that aspiration has occurred. May be fatal if it enters the airways after swallowing.

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

Treatment according to symptoms. In case of ingestion, always assume that aspiration has occurred. Do NOT induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration.

SECTION 5: FIREFIGHTING MEASURES

Flammability

Extremely flammable liquid.

5.1. Extinguishing media

Suitable extinguishing media:

- Foam (specifically trained personnel only),
- Water fog (specifically trained personnel only),
- Dry chemical powder,
- Carbon dioxide,
- Inert gases (subject to regulations),
- Sand or earth.

Unsuitable extinguishing media:

Do not use direct water jets on the burning product; they could cause splattering and spread the fire.

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2. Special hazards arising from the substance or mixture

Combustion Products

Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates and gases, including carbon monoxide and unidentified organic and inorganic compounds.

If sulfur compounds are present in appreciable amounts, combustion products may include also H_2S and SO_x (sulfur oxides) or sulfuric acid.

Specific Hazards

If tanks or containers with product are exposed to fire, there is a hazard of explosion and fire due to increased pressure inside the vessel. If spillage of product occurs, the mixture of hydrocarbon vapours and air may explode or ignite of sparks or heated surfaces. Tanks and containers with product, which are in the direct vicinity of the fire, should be cooled by water jets from the safe distance.

This product will float and can be reignited on surface water.

5.3. Advice for firefighters

Use proper breathing apparatus, self-contained gas masks and impervious protective clothes. In case of a large fire or in confined or poorly ventilated spaces wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Stop or contain leak at the source if safe to do so. Avoid direct contact with released product. Stay upwind. In case of large spillages, alert occupants in downwind areas.

Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares).
If required, notify relevant authorities according to all applicable regulations.

6.1.2. For emergency responders

Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons.

NOTE: gloves made of PVA are not water-resistant, and are not suitable for emergency use.

Work helmet. Antistatic non-skid safety shoes or boots. Goggles or face shield, if splashes or contact with eyes is possible or anticipated.
Respiratory protection: A half or full-face respirator with filter(s) for organic vapours (and when applicable for H_2S) or a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.
Product is extremely flammable liquid, any spillage or leak is a severe fire or explosion hazard.

6.2. Environmental precautions

Spillages onto Land

Stop leak at the source if safe to do so. Prevent product from entering sewers, rivers, waterways or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials.
Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation and fire risk. Do not use direct jets.
When inside buildings or confined spaces, ensure adequate ventilation.

Spillages on water or at sea

Stop or contain leak at the source if safe to do so. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment.

6.3. Methods and material for containment and cleaning up

Spillages onto Land

Absorb spilled product with suitable non-combustible materials. Collect free product with suitable means. Transfer collected product and other contaminated materials to suitable containers for recycle, recovery or safe disposal.
In case soil contamination, remove contaminated soil and treat this in accordance with local regulations.

Spillages on Water or at Sea

Collect spilled product by absorbing with specific floating absorbents. Large spillages in open waters should be contained with floating barriers or other mechanical means and recovered, only if this is strictly necessary and if fire/explosion risks can be adequately prevented. Otherwise control the spreading of the spillage, and let the product evaporate naturally. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other materials in suitable tanks or containers for recovery or safe disposal.

Additional information

NOTE: recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions. For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken.
Spillages of limited amounts of products, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which are unlikely to entail exposure to dangerous concentrations. A possible exception may regard the build-up of dangerous concentrations in specific spots, like trenches, depressions or confined spaces. In all these circumstances, however, the correct actions should be assessed on a case-by-case basis.

6.4. Reference to other sections

See SECTION 8 for Exposure controls/personal protection. See SECTION 13 for Disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Obtain special instructions before use. Ensure that all relevant regulations regarding explosive atmospheres, and handling and storage facilities of flammable products, are followed.
A specific assessment of inhalation risks from the presence of H_2S in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases must be made to help determine controls appropriate to local circumstances.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Use and store only outdoors or in a well-ventilated area. Avoid contact with the product.
Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Handling

Take precautionary measures against static electricity. Ground/bond containers, tanks and transfer/receiving equipment. Use non-explosive electrical, ventilation and lighting equipment. Use only non-sparking tools.
The vapour is heavier than air. Beware of accumulation in pits and confined spaces.
Do not use compressed air for filling, discharging, or handling operations.
Avoid contact with skin and eyes. Do not ingest. Avoid breathing vapours. Use personal protective equipment as required.

Storage

Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation.
Storage installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills.
Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.
Before entering storage tanks and commencing any operation in a confined area check the atmosphere for oxygen content and flammability.
Store separately from oxidising agents.

Recommended and Unsuitable Materials for Storage

Recommended materials: For containers, or container linings use mild steel, stainless steel.
Unsuitable materials: some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

Container Advice

If the product is supplied in containers: Keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labelled. Protect from the sunlight.
Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability/explosion hazards. Open slowly in order to control possible pressure release. Empty containers may contain flammable product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Hygiene measures

Ensure that proper housekeeping measures are in place. Contaminated materials should not be allowed to accumulate in the workplace and should never be kept inside the pockets. Keep away from food and beverages. Do not eat, drink or smoke while using this product. Wash the hands thoroughly after handling. Change contaminated clothes at the end of working shift.

7.3. Specific end use(s)

Product is used as a fuel.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Substances for which occupational exposure limit values need to be controlled in the work environment:

Gasoline, CAS No. 86290-81-5

Lithuanian Hygiene Standard HN 23:2011:

Substance Name	CAS No.	Limit value						Markers of health effects	Note
		Long-term exposure limit value (LTEL)		Short-term exposure limit value (STEL)		Threshold Limit Value (TLV)			
		mg/m^3	ppm	mg/m^3	ppm	mg/m^3	ppm		
Gasoline	86290-81-5	200	-	300	-	-	-	-	Lithuanian Hygiene Standard HN 23:2011
MTBE	1634-04-4	183.5	50	367	100	-	-	Acute exposure	Lithuanian Hygiene Standard HN 23:2011
Ethanol	64-17-5	1000	500	1900	1000	-	-	-	Lithuanian Hygiene Standard HN 23:2011
Methanol	67-56-1	260	200	-	-	-	-	The substance can enter the body through intact skin	Lithuanian Hygiene Standard HN 23:2011

Exposure Limits

Comply with established national occupational exposure limits. Where not established, the following short-term exposure limit is recommended – 300 mg/m^3.

Substance: Gasoline CAS No. 86290-81-5					
State	Limit value – Eight hours		Limit value – Short term		Legal basis
	ppm	mg/m^3	ppm	mg/m^3	
Belgium	300	900	500	1500	Source: GESTIS International Limit Value Database
Canada	300	890	500(1)	1480(1)	Source: GESTIS International Limit Value Database
Ireland	300		500(1)		Source: GESTIS International Limit Value Database
Norway	50(1) 100(2)	175(1) 500(2)			Source: GESTIS International Limit Value Database
Romania		300		500(1)	Source: GESTIS International Limit Value Database
Spain	300				Source: GESTIS International Limit Value Database
Sweden	50(1) 200(2)	180(1) 800(2)	75(1)(4) 300(2)(4)	250(1)(4) 1200(2)(5)	Source: GESTIS International Limit Value Database

	200(3)	900(3)	300(3)(4)	1400(3)(5)	
The Netherlands		240(1)		480(1)(2)	Source: GESTIS International Limit Value Database
Remarks					
Canada	(1) 15 minutes average value				
Ireland	(1) 15 minutes average value				
Norway	(1) Essentially n-hexane (2) Unspecified				
Romania	(1) 15 minutes average value				
Sweden	(1) Industrial, hexane type (2) Industrial, heptane type (3) Industrial, octane type (4) Short-term value, 15 minutes average value (5) Ceiling limit value				
The Netherlands	(1) As fuel for combustion engines. This mixture is carcinogenic if the benzene content is > 0.1%. (2) 15 minutes average value				

Biological limit values (BLV)

No biological limit value has been established.

Recommended monitoring procedures

Standard monitoring procedures must be followed.

Follow the monitoring measures applied in the country.

Derived No Effect Level DNEL

Derived No Effect Level (DNEL) or other conclusions of hazardous health effects:

Substance: Gasoline **CAS Nr. 86290-81-5**			
Route of exposure	Type of exposure	Hazard assessment conclusion	Most sensitive endpoint
Workers			
Systemic effects			
Inhalation	Long term exposure	No hazard identified	
Inhalation	Acute/short term exposure	DNEL 1286.4 mg/m³	Neurotoxicity
Dermal	Long term exposure	No hazard identified	
Dermal	Acute/short term exposure	No hazard identified	
Local effects			
Inhalation	Long term exposure	DNEL 837.5 mg/m³	Irritation (respiratory tract)
Inhalation	Acute/short term exposure	DNEL 1066.67 mg/m³	Irritation (respiratory tract)
Dermal	Long term exposure	Low hazard (no threshold derived)	
Dermal	Acute/short term exposure	Low hazard (no threshold derived)	
Eyes	Local effects	No hazard identified	
General Population			
Systemic effects			
Inhalation	Long term exposure	No hazard identified	

Inhalation	Acute/short term exposure	DNEL 1152 mg/m³	Neurotoxicity
Dermal	Long term exposure	No hazard identified	
Dermal	Acute/short term exposure	No hazard identified	
Oral	Long term exposure	No hazard identified	
Oral	Acute/short term exposure	No hazard identified	
Local effects			
Inhalation	Long term exposure	DNEL 178.57 mg/m³	Irritation (respiratory tract)
Inhalation	Acute/short term exposure	DNEL 640 mg/m³	Irritation (respiratory tract)
Dermal	Long term exposure	Low hazard (no threshold derived)	
Dermal	Acute/short term exposure	Low hazard (no threshold derived)	
Eyes	Local effects	No hazard identified	

Predicted No Effect Concentrations PNEC

UVCB hydrocarbon: technically, the PNEC is not determined or cannot be determined.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Reduce exposure by using closed systems, sufficient general and local ventilation. If exposure is likely, restrict access to area. Provide training for staff.

During various technical and process operations product vapour may be emitted into the environment, therefore the concentration in working environment air shall be controlled to the minimum allowed limit.

8.2.2. Individual protection measures, such as personal protective equipment

a) Eye/face protection

Wear safety glasses in circumstances where eye contact may occur (e.g. acc. to EN 166). Do not use contact lenses.

b) Skin protection

i) Hand protection

Use petroleum product resistant gloves (tested and compliant to EN 374). Check before use. Use only with clean hands. Contaminated gloves should be replaced. Always seek advice from glove suppliers for use, storage, care and replacement of gloves.

ii) Other

Wear protective clothes (according to EN 465) and other protection equipment. Protective clothing should be regularly inspected and maintained.

c) Respiratory protection

If during operations the exposure of employees to large amounts of product vapour and gas is inevitable, suitable respiratory protective equipment, such as A2 filtering mask or analogous should be applied (e.g. according to EN 14387). When working in vessel internals or other confined spaces **do not** use filtering masks but the special self-contained protective equipment. Respiratory protection equipment should be selected and used in accordance with the manufacturer's instructions and requirements established by the law.

d) Thermal hazards

If applicable, use heat-resistant personal protective equipment.

Hygiene measures

Comply with personal hygiene requirements. Wash hands before breaks and after work. Wash immediately in case of skin contact.

8.2.3. Environmental exposure controls

To ensure the compliance of ventilation and process equipment with requirements of environmental legislation, emissions of such equipment are subject to verification. In some cases vapour filterring installations or process equipment modifications may be necessary for the reduction of emission to allowed limit.
Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Physical state	Liquid
b) Colour	Clear, colourless
c) Odour	Typical odour of hydrocarbons
d) Melting point/freezing point	Below minus 20 °C
e) Boiling point or initial boiling point and boiling range	30–210 °C
f) Flammability	Flamable liquid
g) Lower and upper explosion limit	1.0–6.0 %
h) Flash point	Below minus 40 °C
i) Auto-ignition temperature	> 290 °C
j) Decomposition temperature	Not applicable
k) pH	Not applicable
l) Kinematic viscosity	< 1 mm^2/s (at 40 °C)
m) Solubility	Not applicable
n) Partition coefficient n-octanol/water (log value)	Not applicable
o) Vapour pressure	45–100 kPa (at 40 °C)
p) Density and/or relative density	Max 0.78 g/cm^3 (at 15 °C)
q) Relative vapour density	3–4 (rel. to air.)
r) Particle characteristics	Not applicable for liquids

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Based on the available data, meets the CLP Regulation criteria as Category 1 Flammable Liquids.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

Stable at ambient temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions with strong oxidizing agents.

10.4. Conditions to avoid

High ambient temperature.
Avoid electrostatic discharges and other ignition sources.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.

10.5. Incompatible materials

Avoid contact with strong oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition products vary depending on conditions.

Partial decomposition produces fume, carbon dioxide, carbon monoxide and other harmful gases. Concentration of toxic gas in a confined space or premises may reach a hazardous limit.

SECTION 11: TOXICOLOGICAL INFORMATION

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

a) acute toxicity

Not classified for acute oral toxicity based on an oral LD_{50} > 5000 mg/kg bw (test method equivalent or similar to OECD 401).

Not classified for acute inhalation toxicity (test method equivalent or similar to OECD 403).

Not classified for acute dermal toxicity based on a dermal LD_{50} of > 2000 mg/kg body weight (test method equivalent or similar to OECD 402).

b) skin corrosion/irritation

Classified as irritating to the skin, Cat. 2, H315: Causes skin irritation. Test method OECD 404.

c) serious eye damage/irritation

Does not meet the classification criteria based on available data. Test method equivalent or similar to OECD 405.

d) respiratory or skin sensitisation

Does not meet the classification criteria based on available data (test method equivalent or similar to OECD 406).

e) germ cell mutagenicity

Classified as mutagenic based on available data, Cat. 1B, H340: May cause genetic defects (weight of evidence approach).

f) carcinogenicity

Classified as carcinogenic, Cat. 1B, H350: May cause cancer (weight of evidence approach).

g) reproductive toxicity

Classified as toxic to reproductive system, Cat. 2, H361: Suspected of damaging fertility or the unborn child. Suspected of damaging fertility and the unborn child, when inhaled (test method equivalent or similar to OECD 416).

h) STOT-single exposure

Classified as Specific Target Organ Toxicant upon single exposure, Cat. 3, H336: May cause drowsiness or dizziness (weight of evidence approach).

i) STOT-repeated exposure

Does not meet the classification criteria based on available data (weight of evidence approach).

j) aspiration hazard

Classified as presenting an aspiration hazard, Cat. 1, H304: May be fatal if swallowed and enters airways. Based on a kinematic viscosity ≤ 20.5 mm^2/s at 40 °C.

Symptoms related to the physical, chemical and toxicological characteristics, delayed and immediate effects as well as chronic effects from short and long-term exposure

Vapour of product low concentration is slightly irritating to eyes and respiratory system. The liquid product, when in contact with the eyes, may cause transient eye stinging or redness, and if splashed on the skin, it may slightly irritate and dry the skin.

Unlikely to cause harm if swallowed in small amounts, though larger quantities may cause nausea and diarrhea. In case of ingestion assume that aspiration has occurred.

Prolonged or repeated product contact with skin may cause nausea, dizziness, headache and drowsiness; possible chemical pneumonitis. Exposure to product contained benzene (when benzene content exceeds 0.1% v/v) may result in carcinogenic effects. Exposure to product contained benzene may result in carcinogenic affects to the hematopoietic system causing blood disorders including anemia and leukemia.

NOTE. Product handling under typical conditions does not pose a toxicological hazard; however, even a short deliberate inhalation of large quantity of high concentration product vapour may cause loss of consciousness.

11.2 Information on other hazards

Endocrine disrupting properties
Not applicable. The substances are not considered an endocrine disruptor.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Spills may form a film on water surfaces causing physical damage to aquatic life. Oxygen transfer can also be impaired due to the formed film.
Classified as hazardous to the aquatic environment — Chronic, Cat. 2, H411: Toxic to aquatic life with long lasting effects.
Short term toxicity to fish
The 96 h LL_{50} for freshwater fish (*Oncorhynchus mykiss*) is 10 mg/l (based on data of similar substances).
The 96 h LL_{50} for freshwater fish (*Pimephales promelas*) is 8.2 mg/l (based on data of similar substances).
Short-term toxicity to aquatic invertebrates
EL_{50} (*Daphnia magna*, 48 h) 4.5 mg/l (based on data of similar substances).
Long-term toxicity to aquatic invertebrates
NOELR 21-day value 2.6 mg/l based on reproduction with *Daphnia magna*.
Toxicity to aquatic algae and cyanobacteria
EL_{50} (*Pseudokirchnerella subcapitata,* 72 h) value 3.1 mg/l. The 72-hour NOELR value for *Pseudokirchnerella subcapitata* is 0.5 mg/l based on growth rate.
Toxicity to microorganisms
The estimated 40 h EL_{50} value for *Tetrahymena pyriformis* is 15.41 mg/l.

12.2. Persistence and degradability

Product is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this mixture.

12.3. Bioaccumulative potential

Product is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this mixture.

12.4. Mobility in soil

Product is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for the risk assessment of this mixture.

12.5. Results of PBT and vPvB assessment

This mixture does not contain constituents included in the SVHC candidate list as PBT/vPvB at concentrations above 0.1%.

12.6. Endocrine disrupting properties

This mixture does not contain any hydrocarbon structures that have been identified as having endocrine disrupting properties at concentrations equal to or greater than 0.1%.

12.7. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposed of by decontamination in accordance with national requirements and local regulations or via a licensed waste disposal contractor. Note hazards arising from waste, and undertake required safety measures when handling it. Personnel involved in waste handling should wear personal protective equipment.

Empty storage tanks and railway tank cars may contain product residues; therefore, warning labels are to be retained as a guide to the safe tank handling and waste disposal. Empty containers represent a fire hazard as they may contain flammable product residues and vapour.
DO NOT weld, solder and repair in other ways the tanks without proper preparation.

SECTION 14: TRANSPORT INFORMATION

Labels

Marine pollutant

Land transport (ADR-RID)

14.1. UN number or ID number

1203

14.2. UN proper shipping name

UN 1203, GASOLINE (Gasoline Verva)

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Hazard identification No.	33
Classification code	F1
Labels	3
Special provisions	243, 534, 664
Tunnel restriction code	2 (D/E)

For details on special provisions, see In chapter 3.3 of the ADR / RID regulation.
See also SECTION 7 of the SDS for handling and storage advice.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Inland waterway transport (UN RTDG/ADN(R))

14.1. UN number or ID number

1203

14.2. UN proper shipping name

UN 1203, GASOLINE (Gasoline Verva)

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Classification code	F1
Labels	3
Special provisions	243, 534
Equipment required	PP, EX, A

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Marine transport (UN RTDG/IMDG)

14.1. UN number or ID number

1203

14.2. UN proper shipping name

UN 1203, GASOLINE (Gasoline Verva)

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

EmS number	F-E, S-E
Limited and excepted quantities	1 L
IBC instructions	IBC02

1203 is category E for stacking and separation

14.7. Maritime transport in bulk according to IMO instruments

IMO tank instructions	-

Air transport (UN RTDG/ICAO/IATA)

14.1. UN number or ID number

1203

14.2. UN proper shipping name

UN 1203, GASOLINE (Gasoline Verva)

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Limited and excepted quantities	1 L
Special provisions	A100

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: REGULATORY INFORMATION

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

Relevant EU/international legislations:

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)
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 (CLP)
Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Council Regulation (EC) No 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No 1907/2006 (REACH)
Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment
Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste
Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances
Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work
Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work
European Agreement on the International Carriage of Dangerous Goods by Road / Waterways (ADR / MDG)
European Agreement on the International Carriage of Dangerous Goods by Air (IATA)
2000/532/EC: Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes
Regulation (EC) No 1907/2006 (REACH):
- SVHC (Candidate List of substances of very high concern for Authorisation): Not applicable
- REACH Annex XIV (Authorisation List): Not applicable
- REACH Annex XVII (Substances restricted under REACH): Not applicable

Regulation (EU) No 649/2012 (PIC): Not applicable
Regulation (EC) No 850/2004 (POT): Not applicable
Regulation (EC) No 1107/2009 (Plant protection products): Not applicable
Regulation (EU) No 528/2012 (Biocidal products): Not applicable
Regulation (EC) No 648/2004 (Detergents): Not applicable
Regulation (EC) No 1005/2009 (OSAM): Not applicable
Directive 2004/37/EC (related to exposure to carcinogens or mutagens at work): Not applicable

Note: Any subsequent updates, amendments and/or additions to the legislation should be duly considered. The list of legal acts is not exhaustive.

15.2. Chemical safety assessment

Chemical safety assessment has been conducted.

SECTION 16: OTHER INFORMATION

Revision of safety data sheet: 2023-05-30
Revised: all sections.
During the review of the SDS, the data presented were clarified and arranged in accordance with the European Commission Regulation (EU) No. 2020/878 requirements.

Abbreviations and acronyms:

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
BLV	Biological limit values
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures
DNEL	Derived No-Effect Level
EC	EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of Notified Chemical Substances)
EL_{50}	Effective loading rate resulting in 50% effect
EmS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EN	European standard of European Committee for Standardization
ErL_{50}	Loading Rate of Test Substance (in dilution water) which causes 50% reduction in algal growth rate
EU	European Union
IATA	International Air Transport Association
IBC	Intermediate bulk container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
IMO	International Maritime Organization
JT	United Nations
LC_{50}	Lethal concentration for 50% percent of test organisms
LD_{50}	Lethal dose for 50% of test organisms (median lethal dose)
LL_{50}	Lethal load for 50% of the test organisms
LR	Republic of Lithuania
LTEL	Long-term exposure limit value
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEL	Non observed effect level
OECD	Organization for Economic Cooperation and Development
PBT	Persistent, bioaccumulative and toxic
PNEC	Predicted no-effect concentration
RCR	Risk characterization ratio
RID	The Regulation concerning the International Carriage of Dangerous Goods by Rail
RTDG	Recommendations on the Transport of Dangerous Goods
REACH	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL	Short-term exposure limit value
STOT	Specific target organ toxicity
UFI	Unique Formula Identifier
UVCB	Substance of unknown or variable composition, complex reaction products or biological materials
vPvB	very Persistent and very Bioaccumulative

Full text of Hazard Statements:
H224: Extremely flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child. Suspected of damaging fertility and the unborn child, when inhaled.
H411: Toxic to aquatic life with long lasting effects.

Key literature references and sources for data
Registration documentation

Publicly available data from the national limit value databases of the European Chemicals Agency (ECHA), The GESTIS International Limit values Database.

Training advice
Employees/users must be trained/familiarized with the relevant safety information provided.

Do not use the product for any purposes other than indicated in the manufacturer's information. During such use the user may be exposed to unforeseen hazards.
Should you have any questions or doubts regarding SDS, its contents or any other concerns related to safety of the product, please contact us by e mail: post@orlenlietuva.lt

NOTE: Information provided herein is considered to be accurate as of the date specified below. No warranty is made as to the accuracy or completeness of the data and information provided in this MSDS. Information provided herein serves only as guidelines for safe work, use, processing, storage, and waste handling. It cannot be considered as a warranty or statement of quality. This information applies only to the specific product and may not be suitable for use of the product in combination with any other substances or in any other manner contrary to that described in this document.
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