

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1. Product identifier**

Trade name: Jet Fuel JET A-1
Name of the Substance: Kerosine (petroleum), sweetened
EC No.: 294-799-5
CAS No.: 91770-15-9
Index No.: 649-427-00-X
REACH Registration No.: 01-2119502385-46-0009

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. 3, H226
Asp. Tox. 1, H304
Skin Irrit. 2, H315
STOT SE 3, H336 (Organs affected: Central nervous system. Route of exposure: inhalation)
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:

H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.

Precautionary statements:

P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.



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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.

2.3. Other hazards

Product is flammable liquid. Light hydrocarbons evaporate slowly. Vapour irritates eyes and respiratory tract. Liquid product splashes irritate eyes and skin. Long-term and repeated contact causes skin dryness and irritation. May cause chemical pneumonia if inhaled to lungs.

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

Trade name: Jet Fuel JET A-1

Substance Name	Concentration, %	Labelling according to CLP Regulation
Kerosine (petroleum), sweetened EC No.: 294-799-5 CAS No.: 91770-15-9 Index No.: 649-427-00-X REACH Registration No.: 01-2119502385-46-0009	Up to 100	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 (Organs affected: Central nervous system. Route of exposure: inhalation) Aquatic Chronic 2, H411
Additives	0–0.004	

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.

3.2. Mixtures

Not applicable.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Spillages make surface slippery.

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

Inhalation is unlikely because of the low vapour pressure of the substance at ambient temperature. Exposure to vapours may however occur when the substance is handled at high temperatures with poor ventilation.

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.

Skin Contact – reddening, irritation.

Eye Contact – May cause mild reversible eye irritation.

Ingestion – few or no symptoms expected. If any, nausea and diarrhea 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

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,
- Steam.

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 (H_2S ir SO_x).

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 substance 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 material. 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 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. 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.

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.

Properly sealed mobile tank cars should be used for product transportation.

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. Do not breathe 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.

Store product only in tanks or containers designed for flammable liquids. 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.



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Product vapours (gaseous hydrocarbons) can build up in the headspace of tanks, they may ignite at temperatures below flash point, therefore, care should be taken to avoid static electrical discharge and all ignition sources during product gauging or sampling from storage tanks.

Store separately from oxidizing 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:

Kerosine (petroleum), sweetened, CAS No.: 91770-15-9

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		
Kerosine (petroleum), sweetened	91770-15-9	350	-	500	-	-	-	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 – 500 mg/m³.

Biological limit values (BLV)

No biological limit value has been established for this substance.

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:

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	No hazard identified	
Dermal	Long term exposure	No hazard identified	
Dermal	Acute/short term exposure	No hazard identified	
Local effects			
Inhalation	Long term exposure	No hazard identified	
Inhalation	Acute/short term exposure	No hazard identified	
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	No hazard identified	
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	No hazard identified	
Inhalation	Acute/short term exposure	No hazard identified	
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

Substance is a hydrocarbon UVCB: 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 EN374). 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 filtering 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	Max minus 47 °C
e) Boiling point or initial boiling point and boiling range	150–300 °C
f) Flammability	Flamable liquid
g) Lower and upper explosion limit	0.6–6.0 %
h) Flash point	> 40 °C
i) Auto-ignition temperature	> 220 °C
j) Decomposition temperature	Not applicable
k) pH	Not applicable
l) Kinematic viscosity	< 8 mm ² /s (at 40 °C)
m) Solubility	Not applicable to UVCB substances
n) Partition coefficient n-octanol/water (log value)	Not applicable to UVCB substances



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|------------------------------------|--|
| o) Vapour pressure | approximately 2 kPa (esant 38 °C) |
| p) Density and/or relative density | 0.775–0.840 g/cm ³ (at 15 °C) |
| q) Relative vapour density | > 3 (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 3 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 LD₅₀ > 5000 mg/kg bw (test method equivalent or similar to OECD 420).

Not classified for acute inhalation toxicity based on analytical NOAEC >5.28 mg/l air (test method equivalent or similar to OECD 403).

Not classified for acute dermal toxicity based on a dermal LD₅₀ 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 (weight of evidence approach).

c) serious eye damage/irritation

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

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

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

f) carcinogenicity

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

g) reproductive toxicity

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

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 $\leq 20.5 \text{ mm}^2/\text{s}$ 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

Product vapour slightly irritates eyes and respiratory tract. Liquid product splashes irritate eyes and skin. Irritating to digestive tract if swallowed. May cause chemical pneumonia if liquid product is inhaled to lungs. In case of ingestion assume that aspiration has occurred.

Prolonged or repeated contact with the product causes drying and irritation of the skin. Vapour irritates eyes and respiratory tract. Prolonged contact with kerosene vapour may cause renal failure.

11.2 Information on other hazards**Endocrine disrupting properties**

Not applicable. The substance is 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 2–5 mg/l. NOEL 2.0 mg/l (test method OECD 203).

Long term toxicity to fish

Estimated freshwater fish NOEL is 0.098 mg/l based on mortality (based on data of similar substances).

Short-term toxicity to aquatic invertebrates

EL_{50} (*Daphnia magna*, 48 h) 1.4 mg/l. NOEL 0.3 mg/l, determined by immobilisation (based on data of similar substances).

Long-term toxicity to aquatic invertebrates

21-day (*Daphnia magna*) chronic reproductive NOEL is 0.48 mg/l. The LOEL is 1.2 mg/l. The EL_{50} based on reproduction is 0.89 mg/l.

Toxicity to aquatic algae and cyanobacteria

EL_{50} (*Pseudokirchnerella subcapitata*, 72 h) value 1–3 mg/l. The 72-hour NOELR value for *Pseudokirchnerella subcapitata* is 1.0 mg/l based on growth rate.

Toxicity to microorganisms

The estimated 72 h EL_{50} value for *Tetrahymena pyriformis* is 677.9 mg/l.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

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

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This material 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

1863

14.2. UN proper shipping name

UN 1863, FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Hazard identification No.

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Classification code F1
Labels 3
Special provisions 664
Tunnel restriction code 3 (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

1863

14.2. UN proper shipping name

UN 1863, FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Classification code F1
Labels 3
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

1863

14.2. UN proper shipping name

UN 1863, FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

EmS number F-E, S-E
Limited and excepted quantities 5 L
IBC instructions IBC03
Special provisions 223
1863 is category A for stacking and separation

14.7. Maritime transport in bulk according to IMO instruments

IMO tank instructions T1

Air transport (UN RTDG/ICAO/IATA)

14.1. UN number or ID number

1863



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14.2. UN proper shipping name

UN 1863, FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

3

14.4. Packing group

III

14.5. Environmental hazards

Environmentally hazardous.

14.6. Special precautions for user

Limited and excepted quantities 10 L

Special provisions A3

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



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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: 2022-11-30

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

**SAFETY DATA SHEET**Acc. to Regulation (EC) No. 1907/2006 (REACH), Annex II
(including amendment of Commission Regulation (EU) 2020/878)**JET FUEL JET A-1**

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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:

H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
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. Public Company *ORLEN Lietuva* shall not be responsible for any damage or injury resulting from incorrect use of the product or any failure to adhere to recommendations.