



AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

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

1.1. Product identifier

- Trade name: **Aviation kerosene**
- Alternative names: Kerosine (petroleum), hydrosulfurized; Kerosine — unspecified; Jet A-1; SAF; Kerosene-type jet fuel; Hydrogenated kerosene
- Substance / mixture: mixture
- REACH registration No.: Not applicable for mixtures
- Index number: Not applicable for mixtures
- CAS number: Not applicable for mixtures
- EC number: Not applicable for mixtures
- UFI code: PG10-E084-N001-2ED7 (notified to PCN); further information – see section 16

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

1.2.1. Identified uses

Aviation kerosene is used primarily as a motor fuel for aircraft turbine engines. For industrial and professional use only.

Aviation kerosene with zero content of sustainable aviation fuel (SAF) may also be used as a feedstock for further chemical processing and for the formulation of mixtures.

Where such a mixture is supplied to the general public, the content of cumene (EC No. 202-704-5) in the mixture shall not exceed 0.1 %.

1.2.2. Uses advised against

Aviation kerosene shall not be used for purposes other than those specified in the relevant operational documentation.

1.3. Details of the supplier of the safety data sheet

1.3.1. Trade name and identification number

ORLEN Unipetrol RPA s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic

IČO (Company ID No.): 275 97 075

☎: +420 476 161 111

fax: +420 476 619 553

email: info@orlenunipetrol.cz

website: www.orlenunipetrolrpa.cz

1.3.2. Place of business

Litvínov Refinery

Záluží 1

436 70 Litvínov

Czech Republic

tel.: +420 476 163 567

fax: +420 476 165 086

Kralupy Refinery

O. Wichterleho 809

278 01 Kralupy nad Vltavou

Czech Republic

+420 315 718 500

+420 315 718 640

1.3.3. E-mail address of the technically competent person responsible for the safety data sheet:

reach.unirpa@orlenunipetrol.cz

1.4. Emergency telephone number

- ORLEN Unipetrol RPA s.r.o. – Dispatch centre** ☎: +420 476 163 111 (24/7)
- Toxicological Information Centre (TIS)** ☎: +420 224 919 293 (24/7)
Na bojišti 1, 120 00 Praha 2, Czech Republic ☎: +420 224 915 402 (24/7)
e-mail: tis@vfn.cz
- Transport Information and Emergency Response System (TRINS)** ☎: +420 476 163 111 (24/7)

Note: Emergency telephone numbers for EU and EEA countries are listed in section 16.

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified as hazardous in accordance with Regulation (EC) No 1272/2008 (CLP):

FLAMMABLE LIQUID, CATEGORY 3; H226	Flam. Liq. 3, H226
ASPIRATION HAZARD, CATEGORY 1; H304	Asp. Tox. 1, H304
SKIN CORROSION/IRRITATION, CATEGORY 2; H315	Skin Irrit. 2, H315
SPECIFIC TARGET ORGAN TOXICITY — SINGLE EXPOSURE, CATEGORY 3; H336	STOT SE 3, H336
CARCINOGENICITY, CATEGORY 1B; H350	Carc. 1B, H350
HAZARDOUS TO THE AQUATIC ENVIRONMENT – CHRONIC HAZARD, CATEGORY 2; H411	Aquatic Chronic 2, H411

Note: Full text of hazard statements is given in Section 16.

2.2. Label elements

<i>Product identifiers</i>		AVIATION KEROSENE Jet A-1; SAF; Kerosene-type jet fuel The product contains: kerosine (petroleum), hydrodesulfurized
<i>Hazard pictogram(s)</i>		
<i>Signal word</i>		DANGER
<i>Hazard statement(s)</i>	H226 H304 H315 H336 H350 H411	Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause cancer. Toxic to aquatic life with long lasting effects.
<i>Precautionary statement(s)</i>	P201 P210 P273 P280 P301 + P310 P308 + P313 P331 P405 P501	Obtain special instructions before use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Wear protective gloves, protective clothing and eye protection or face protection. IF SWALLOWED: Immediately call a POISON CENTER or a doctor. IF exposed or concerned: Get medical advice/attention. Do NOT induce vomiting. Store locked up. Dispose of contents/container as hazardous waste in accordance with national regulations.
<i>Additional information</i>		For professional and industrial use only. ORLEN Unipetrol RPA s.r.o. Záluží 1, 436 70 Litvínov, Czech Republic ☎: +420 476 161 111, +420 476 163 111

AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

2.3. Other hazards

Kerosene is a complex mixture of hydrocarbons, typically boiling in the range of approximately 135 to 300 °C, containing up to 25 % (m/m) aromatic hydrocarbons.

To improve performance properties, aviation kerosene may contain suitable additives, such as antioxidants, conductivity improvers, lubricity additives, etc., in amounts not exceeding a maximum of 0.1 % (m/m).

Kerosene vapours form explosive mixtures with air. The product may accumulate static electricity.

Information on whether the mixture or its components meet the criteria for PBT or vPvB substances is provided in subsection 12.5 (Results of PBT and vPvB assessment).

None of the components of the mixture is included in the Candidate List pursuant to Article 59(1) of Regulation (EC) No 1907/2006 (REACH) (either due to endocrine-disrupting properties or for any other reason).

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. The product is a mixture.

3.2. Mixtures

Chemical name of the mixture component	Index number EC number CAS number REACH registration No.	Concentration (% w/w)	Classification according to Regulation (EC) No 1272/2008 (CLP)
			Specific concentration limits (SCL), M-factors and ATE
Kerosine (petroleum), hydrodesulfurized	649-423-00-8 265-184-9 64742-81-0 01-2119462828-25-0069	70 – 100	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Carc. 1B, H350; Aquatic Chronic 2, H411 not established
Renewable hydrocarbons (kerosene type fraction); HEFA	– 931-082-4 – 01-2119850115-46-xxxx	0 – 30	Flam. Liq. 3, H226; Asp. Tox. 1, H304; EUH066 not established

Note 1: The component Kerosine (petroleum), hydrodesulfurized contains more than 0.1 % w/w of cumene (EC No. 202-704-5).

Note 2: To improve performance properties, kerosene may contain suitable additives – such as cold flow improvers, lubricity additives, corrosion inhibitors, detergents, etc. – typically in concentrations up to a maximum of 0.1 % (m/m).

Note 3: None of the components of the mixture is present in nanoform.

Note 4: Explanation of the abbreviation ATE is given in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. General instructions

Ensure personal safety when providing first aid.



ORLEN
UNIPETROL

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

Call emergency medical services (☎ 155 – Czech Republic, ☎ 112 – EU) and follow their instructions until they arrive. First aid shall always be focused on maintaining and monitoring basic vital functions: consciousness, breathing and circulation. In case of loss of consciousness and absence of breathing, check whether the airways are clear (e.g. by gentle jaw thrust). If the airways are patent, start cardiopulmonary resuscitation (chest compressions combined with rescue breaths) at a ratio of 30:2. Chest compressions only may be performed if the rescuer is not trained or if rescue breaths cannot be given for reasons of personal safety.

If the affected person is unconscious but breathing normally (regularly), place them in the recovery position. If there is any doubt as to whether the person is breathing normally (e.g. long pauses between breaths), act as if breathing has stopped.

The condition of the affected person may change rapidly; therefore, never leave them unattended and continuously monitor consciousness and breathing.

Do not give anything by mouth to an unconscious person or to a person having convulsions; place them in the recovery position only.

4.1.2. When inhaled

Remove the affected person to fresh air, keep them warm and at rest, and seek medical attention.

4.1.3. Skin contact

Remove contaminated clothing and footwear. Wash affected areas thoroughly with water (preferably lukewarm) and soap. If skin irritation persists, seek medical attention.

In case of burns, do not remove the product. Cover the affected area with a sterile dressing (or clean cloth) and seek immediate medical attention.

4.1.4. Contact with eyes

Immediately rinse the eyes with widely open eyelids under running lukewarm water for at least 15 minutes. If the affected person wears contact lenses, remove them before rinsing. Ensure professional medical attention.

4.1.5. When ingested

DO NOT induce vomiting!

If the affected person vomits spontaneously, keep their head below the level of the hips to prevent aspiration of vomit. Seek immediate medical attention.

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

Depending on the level of exposure, the mixture may cause headache, nausea, dizziness, breathing difficulties up to respiratory arrest, convulsions and unconsciousness. In case of ingestion, spontaneous vomiting may occur with a risk of aspiration of the mixture into the lungs and development of pulmonary oedema (chemical pneumonitis), which may be fatal. Direct contact with eyes or skin may cause transient irritation. Prolonged skin contact may result in defatting of the skin.

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

Immediate medical attention is required in case of eye contact, ingestion and/or aspiration of the mixture into the respiratory tract.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: air-foam, dry chemical powder, carbon dioxide (CO₂).

Unsuitable extinguishing media: direct water jet.

Small fires: dry powder or foam fire extinguisher, dry sand or firefighting foam.

5.2. Special hazards arising from the substance or mixture

Vapours are heavier than air and may accumulate and spread along the ground. They may cause flashback upon



AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

ignition, even at a considerable distance from the source of release, resulting in fire and/or explosion. This risk is particularly significant in confined spaces or areas below ground level. In case of fire, toxic and irritating fumes may be released, including carbon monoxide and unburnt hydrocarbons.

5.3. Advice for firefighters

Prevent, as far as possible, contaminated firefighting water from entering sewers, surface water, groundwater and soil.

Cool containers exposed to fire with water spray, as they may explode when heated.

Do not use foam and water simultaneously, as water destroys the foam.

Protective equipment for firefighters: Full protective clothing and self-contained breathing apparatus (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Isolate the area of the incident and prevent access to the endangered area. Stay upwind. Release of this product presents a fire hazard; therefore, eliminate all possible sources of ignition. Do not smoke and do not use open flames. Where possible, ensure adequate ventilation of enclosed spaces. Avoid contact with the mixture and its vapours. When dealing with the consequences of an accidental release or emergency situation, use all recommended personal protective equipment (see subsection 8.2). In case of major spills, evacuate all persons from the endangered area. In areas below ground level and in confined spaces (including sewers), ignition of vapours may lead to an explosion.

6.2. Environmental precautions

Prevent further release of the mixture and contain the spill area. Prevent entry of the mixture into sewers, surface water and groundwater, for example by covering or sealing drainage inlets. Prevent penetration of the mixture into soil.

6.3. Methods and material for containment and cleaning up

Release of this product presents a fire hazard; therefore, use explosion-proof lighting and electrical equipment and non-sparking tools. Absorb the spilled product with suitable non-combustible porous/absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and place it in closed containers for disposal. Dispose of in accordance with applicable waste legislation (see Section 13).

In case of a large release into water, use containment booms and recover the mixture from the water surface using skimmers/separators, or apply absorbent material to the spill and remove the saturated absorbent from the surface by skimming or suction. Consult an expert before the use of dispersants.

6.4. Reference to other sections

For recommended personal protective equipment, see subsection 8.2 (Exposure controls).

For recommended waste disposal methods, see Section 13 (Disposal considerations).

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle the mixture and empty containers (which may contain product residues) only in well-ventilated areas and observe all fire-prevention measures (no smoking, no open flames, elimination of all potential ignition sources). Do not carry out operations such as welding, cutting, grinding or similar activities in the vicinity of containers (including empty ones). Do not use compressed air for filling, emptying or other handling operations. Prevent the generation of static electricity.

General hygiene measures: Observe good personal hygiene practices. Remove contaminated clothing immediately. Do not eat, drink or smoke during work. After work and before eating or drinking, wash hands and exposed parts of

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

the body thoroughly with water and soap; if necessary, treat the skin with a suitable restorative cream. Do not take contaminated clothing, footwear or protective equipment into areas designated for eating.

7.2. Conditions for safe storage, including any incompatibilities

Storage facilities shall comply with fire safety requirements for buildings, and electrical installations shall meet applicable regulations. Store in a cool, well-ventilated place with effective exhaust ventilation, away from heat sources and all sources of ignition. Storage containers shall be kept tightly closed, properly labelled and grounded/earthened. Soft (carbon) steel or stainless steel is recommended as suitable packaging/container material. Do not store near incompatible materials, such as oxidising agents (e.g. oxygen, air, etc.) or other flammable materials.

7.3. Specific end use(s)

Aviation kerosene is used primarily as a fuel for aircraft turbine engines. Kerosene shall be used only in accordance with relevant operating documentation and for approved purposes in compliance with applicable legislation.

It shall not be used as a cleaning agent, for lighting, heating or for ignition of fires. Never discharge into sewers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

According to Government Regulation No. 361/2007 Coll., as amended, laying down conditions for the protection of health at work, the following Permissible Exposure Limits (PEL) and Maximum Permissible Concentrations (NPK-P) of chemical substances in workplace air have been established in the Czech Republic:

Substance	CAS number	PEL [mg/m ³]	NPK-P [mg/m ³]	Notes
Solvent diesel	–	200	1000	not specified
	Occupational exposure limits (PEL or NPK-P) have not been established for the individual components of the mixture, i.e.:			
	– Kerosine (petroleum), hydrodesulfurized (CAS No. 64742-81-0) and – Renewable hydrocarbons (kerosene type fraction); HEFA (EC No. 931-082-4). Therefore, the values for solvent diesel (CAS No. 68334-30-5) are provided in the table above. In addition, it is recommended to observe exposure limits established for components contained in this UVCB substance:			
components present in the UVCB substance “Kerosine (petroleum), hydrodesulfurized” (CAS No.: 64742-81-0)	Substance / CAS number	PEL [mg/m ³]	NPK-P [mg/m ³]	Notes
	Cumene / 98-82-8	50	250	D, K

Note 1: Explanation of the abbreviations PEL and NPK-P is given in Section 16.

Note 2: Explanations of the “Notes” column:

- D - significant contribution of dermal absorption to overall exposure.
- K - carcinogen category 1A or 1B (with hazard statements H350, H350i).

Note 3: Occupational exposure limit values for EU countries are listed in section 16.

8.1.2. DNEL/DMEL values

Risk characterisation required for workers/employees (Assessment subject: **Kerosine (petroleum), hydrodesulfurized**; EC No. 265-184-9):

Route	Type of effect	Hazard conclusion	Most sensitive endpoint
Inhalation	Systemic effects - Long-term	DNEL = 50 mg/m ³	–

Route	Type of effect	Hazard conclusion	Most sensitive endpoint
Dermal	Systemic effects - Acute	no hazard identified	–
	Local effects - Long-term	no hazard identified	–
	Local effects - Acute	DNEL = 250 mg/m ³	–
	Systemic effects - Long-term	DNEL = 7.7 mg/kg bw/day	–
	Systemic effects - Acute	no hazard identified	–
	Local effects - Long-term	low hazard (no threshold derived)	–
	Local effects - Acute	low hazard (no threshold derived)	–
Eyes	Local effects	no hazard identified	–

Risk characterisation required for workers/employees (Assessment subject: **Renewable hydrocarbons (kerosene type fraction); HEFA**; EC No. 931-082-4):

Route	Type of effect	Hazard conclusion	Most sensitive endpoint
Inhalation	Systemic effects - Long-term	DNEL = 147 mg/m ³	subchronic toxicity
	Systemic effects - Acute	no hazard identified	–
	Local effects - Long-term	no hazard identified	–
	Local effects - Acute	no hazard identified	–
Dermal	Systemic effects - Long-term	DNEL = 42 mg/kg bw/day	subchronic toxicity
	Systemic effects - Acute	no hazard identified	–
	Local effects - Long-term	no hazard identified	–
	Local effects - Acute	no hazard identified	–
Eyes	Local effects	no hazard identified	–

Note: Explanation of the abbreviations DNEL/DMEL and bw is given in Section 16.

8.1.3. PNEC values

Environmental risk characterisation (Assessment subject: **Kerosine (petroleum), hydrodesulfurized**; EC No. 265-184-9):

Compartment	Hazard conclusion
Freshwater	no data available: testing technically not feasible
Sediments (freshwater)	no data available: testing technically not feasible
Marine water	no data available: testing technically not feasible
Sediments (marine water)	no data available: testing technically not feasible
Sewage treatment plant	no data available: testing technically not feasible
Soil	no data available: testing technically not feasible
Air	no hazard identified
Secondary poisoning	no potential to cause toxic effects, even in case of accumulation in higher organisms via the food chain

Derivation of specific PNEC values based on experimental data obtained from testing of water-accommodated fractions (WAF – dissolved/emulsified/suspended fractions of the test substance) is not appropriate for hydrocarbon-type UVCB substances. Therefore, environmental risk characterisation of the product was performed using the statistical hydrocarbon block method (HC5 extrapolation) applying the PETROTOX model

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

v3.05.

Environmental risk characterisation (Assessment subject: **Renewable hydrocarbons (kerosene type fraction); HEFA**; EC No. 931-082-4):

Compartment	Hazard conclusion
Freshwater	no data available: testing technically not feasible
Sediments (freshwater)	no data available: testing technically not feasible
Marine water	no data available: testing technically not feasible
Sediments (marine water)	no data available: testing technically not feasible
Sewage treatment plant	no data available: testing technically not feasible
Soil	no data available: testing technically not feasible
Air	no hazard identified
Secondary poisoning	no potential to cause toxic effects, even in case of accumulation in higher organisms via the food chain

Note: Explanation of the abbreviations PNEC and bw is given in Section 16.

8.1.4. Recommended monitoring of the concentration in the workplace

Gas chromatography (GC) with flame ionisation detection (FID) or mass spectrometric detection (MS) in accordance with technical standards EN 689 and EN 482.

8.2. Exposure controls

8.2.1. Technical protective measures for limiting the exposure of people and the environment

Protection against undesirable exposure of humans and the environment shall be ensured by keeping the mixture strictly under control through appropriate engineering measures and by the use of process and control technologies that reduce emissions and subsequent exposure, with the aim of preventing the release of vapours into the ambient air, entry of the mixture into the aquatic environment and soil, and potential human exposure. Areas where the mixture is handled or stored shall be equipped with impermeable floors and spill containment systems (e.g. bunds or collection trays) to retain accidental releases. Adequate general and local ventilation, including effective local exhaust ventilation, shall be ensured.

8.2.2. Individual protective measures

In situations where there is a risk of increased exposure during handling of the product, or where exposure may increase as a result of an accident or emergency situation, employees shall be provided with suitable personal protective equipment (PPE) for the protection of the respiratory tract, eyes, hands and skin, appropriate to the nature of the activities performed. Suitable respiratory protection shall also be used where compliance with occupational exposure limits cannot be ensured by engineering measures alone, or where exposure via inhalation may pose a risk to human health. Where PPE is used continuously during prolonged work, safety breaks shall be introduced if required by the nature of the protective equipment. All PPE shall be kept in a serviceable condition and damaged or contaminated equipment shall be replaced immediately.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE):

(The specific type of protective equipment shall be selected according to the nature of the activity performed and the amount and concentration of the hazardous substance/mixture at the workplace.)

- **Respiratory protection:** In case of insufficient ventilation and/or local exhaust ventilation, and in the event of release, use a protective mask complying with EN 140 equipped with a filter effective against organic vapours. For emergency response and accident clean-up operations, use self-contained breathing apparatus (SCBA);
- **Eye/face protection:** Safety goggles complying with EN 166;
- **Hand protection:** Chemically resistant gloves tested in accordance with EN 374. Suitable materials include, for example:

Activity	Glove material	Layer thickness	Breakthrough time
----------	----------------	-----------------	-------------------



AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

Routine work (risk of splashing)	natural latex	1 mm	120 minutes
Spill clean-up / emergency response	nitrile	0.4 mm	480 minutes

- **Protection of other body parts:** Antistatic, flame-retardant protective clothing; antistatic safety footwear;
- **Thermal hazards:** Not relevant under intended conditions of use;
- **Additional measures:** It is recommended that the workplace be equipped with an emergency safety shower and eye-wash facilities.

8.2.3. Environmental exposure controls

Prevent release of the product into the environment by all available means. See Section 6.2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Unless otherwise stated, the information is taken from the registration documentation.

Data for the mixture component **Kerosine (petroleum), hydrosulfurized** (EC No. 265-184-9), which is the main component of the mixture:

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Physical state		liquid	CSR	at 20 °C and 1013.25 hPa
Colour		colourless to pale yellow	CSR	
Odour		typical kerosene	CSR	
Melting point/freezing point	[°C]	-49 – -20	CSR	influence of variable UVCB composition
Boiling point or initial boiling point and boiling range	[°C]	90 – 320	CSR	influence of variable UVCB composition
Flammability		flammable liquid and vapour	CSR	
Upper explosion limit / upper flammability limit	vol. %	6.5	GESTIS	not stated in CSR
Lower explosion limit / lower flammability limit	vol. %	0.6	GESTIS	not stated in CSR
Flash point	[°C]	29 – 70	CSR	
Auto-ignition temperature	[°C]	220 – 250	CSR	
Decomposition temperature	[°C]	does not decompose at temperatures relevant to use		not stated in CSR
pH		not relevant for petroleum substances (non-polar substances)		not stated in CSR
Kinematic viscosity	[mm ² /s]	2.8 – 4.3	CSR	at -20 °C



AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)
Replaces: 24. 04. 2023 – version 9(1)
First issue: 10. 12. 1999

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Solubility in water	[mg/L]	practically insoluble		influence of variable UVCB composition
Partition coefficient n-octanol/water (log value)	[log Kow]	1.99 – 18.02	CSR	influence of variable UVCB composition
Vapour pressure	[kPa]	1.0 – 3.7	CSR	at 37.8 °C
Relative density	water = 1	0.77 – 0.85	CSR	at 15 °C
Relative vapour density	air = 1	4.5	ICSCs	not stated in CSR
Particle characteristics		–		not applicable – liquid

Data for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4):

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Physical state		liquid	registration documentation	at 20 °C and 1013.25 hPa
Colour		clear	registration documentation	
Odour		kerosene-like	registration documentation	
Melting point/freezing point	[°C]	-43.5 – -20	registration documentation	at 1013.25 hPa
Boiling point or initial boiling point and boiling range	[°C]	125 – 275	registration documentation	at 1013.25 hPa
Flammability		flammable liquid and vapour	registration documentation	
Upper explosion limit / upper flammability limit	vol. %	data not available	registration documentation	
Lower explosion limit / lower flammability limit	vol. %	data not available	registration documentation	
Flash point	[°C]	38 – 48	registration documentation	at 1013.25 hPa
Auto-ignition temperature	[°C]	200 – 215	registration documentation	at 1013.25 hPa
Decomposition temperature	[°C]	data not available		
pH		data not available	registration documentation	
Kinematic viscosity	[mm ² /s]	1.29 – 3.27	registration documentation	at 20 °C
Solubility in water	[mg/L]	<1	registration documentation	at 25 °C
Partition coefficient n-octanol/water (log value)	[log Kow]	6.2–7.5	registration documentation	
Vapour pressure	[kPa]	0.043 – 0.178	registration documentation	at 25 °C



AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Relative density	water = 1	0.73 – 0.77	registration documentation	at 20 °C
Relative vapour density	air = 1	data not available		
Particle characteristics		–		not applicable – liquid

Note: The term 'explosion limit' is synonymous to 'flammability limit', used outside the Union.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Flammable liquid and vapour.

9.2.2. Other safety characteristics

No other safety characteristics have been identified.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is stable under normal conditions of use.

10.2. Chemical stability

The product is chemically stable under normal conditions.

10.3. Possibility of hazardous reactions

Incomplete combustion under conditions of insufficient air supply may result in the formation of carbon monoxide.

10.4. Conditions to avoid

Formation of concentrations within the explosive limits, presence of ignition sources, contact with open flames.

10.5. Incompatible materials

Oxidising substances and mixtures, self-igniting (pyrophoric) substances and mixtures.

10.6. Hazardous decomposition products

None under normal conditions of use. In case of incomplete combustion, carbon monoxide and soot may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

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

11.1.1. Toxicological effects of the substance/mixture

Data for the mixture component **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9):

HAZARD CLASS	DATA FROM REGISTRATION DOCUMENTATION		EVALUATION
	DESCRIPTION	RESULT	
Acute toxicity	oral (OECD 401): inhalation (OECD 403): dermal (OECD 404):	LD ₅₀ : > 5000 mg/kg LC ₅₀ : > 5280 mg/m ³ LD ₅₀ : > 2000 mg/kg	does not meet the criteria for classification

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

HAZARD CLASS	DATA FROM REGISTRATION DOCUMENTATION		EVALUATION
	DESCRIPTION	RESULT	
Skin corrosion/irritation	tests on the substance and its components (OECD 404)	causes skin irritation (3.46/4)	meets the criteria for classification (H315)
Serious eye damage/eye irritation	tests on the substance and its components (OECD 405)	–	does not meet the criteria for classification
Respiratory or skin sensitisation	tests on the substance and its components (OECD 406)	the substance and its components do not induce allergic reactions	does not meet the criteria for classification
Germ cell mutagenicity	OECD 476	based on the composition, the substance is not considered suspected of mutagenicity	does not meet the criteria for classification
Carcinogenicity	test data	based on available data (cumene content, EC No. 202-704-5, > 0.1 % w/w), the substance, and therefore the mixture, is considered carcinogenic	meets the criteria for classification (H350)
Reproductive toxicity	1) fertility: 2) developmental toxicity:	no available data indicate reproductive toxicity	does not meet the criteria for classification
STOT – single exposure	acute toxicity studies (oral, dermal, inhalation)	target organ: central nervous system; route of exposure: inhalation	meets the criteria for classification (H336)
STOT – repeated exposure	1) oral: 2) inhalation: 3) dermal:	NOAEL: 750 mg/kg bw/day NOAEL: ≥1000 mg/m ³ NOAEL: ≥495 mg/kg bw/day	does not meet the criteria for classification
Aspiration hazard		at kinematic viscosity below 20.5 mm ² /s (40 °C), the product, if swallowed and enters the airways, causes lung damage and may be fatal	meets the criteria for classification (H304)

Data for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4):

HAZARD CLASS	DATA FROM REGISTRATION DOCUMENTATION		EVALUATION
	DESCRIPTION	RESULT	
Acute toxicity	oral (OECD 401): inhalation (OECD 403): dermal (OECD 404):	LD ₅₀ : > 2000 mg/kg bw/day LC ₅₀ : – LD ₅₀ : > 2000 mg/kg	does not meet the criteria for classification
Skin corrosion/irritation	tests on the substance and its components (OECD 404)	based on available data, criteria are not met	does not meet the criteria for classification
Serious eye damage/eye irritation	tests on the substance and its components (OECD 405)	based on available data, criteria are not met	does not meet the criteria for classification

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

HAZARD CLASS	DATA FROM REGISTRATION DOCUMENTATION		EVALUATION
	DESCRIPTION	RESULT	
Respiratory or skin sensitisation	tests on the substance and its components (OECD 406)	based on available data, criteria are not met	does not meet the criteria for classification
Germ cell mutagenicity	OECD 476	based on available data, criteria are not met	does not meet the criteria for classification
Carcinogenicity	test data	based on available data, criteria are not met	does not meet the criteria for classification
Reproductive toxicity	1) fertility: 2) developmental toxicity:	based on available data, criteria are not met	does not meet the criteria for classification
STOT – single exposure	acute toxicity studies (oral, dermal, inhalation)	based on available data, criteria are not met	does not meet the criteria for classification
STOT – repeated exposure	1) oral: 2) inhalation: 3) dermal:	based on available data, criteria are not met	does not meet the criteria for classification
Aspiration hazard		if swallowed and enters airways, causes lung damage and may be fatal	meets the criteria for classification (H304)

Note: Explanation of the abbreviations LC_{50}/LD_{50} and NOAEL is given in Section 16.

11.1.2. Information on likely routes of exposure

Exposure may occur through inhalation, accidental ingestion, and dermal absorption of the product components. Due to the relatively low volatility of kerosene fractions, dermal exposure may, under certain operating conditions, be more significant than inhalation exposure.

11.1.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Depending on the exposure dose, the mixture may cause headache, sore throat, cough, breathing difficulties, chest tightness, impairment of central nervous system function, nausea, drowsiness and dizziness. In case of ingestion, abdominal cramps, spontaneous vomiting and possibly diarrhoea may occur. Direct contact with eyes or skin may cause transient irritation associated with redness, swelling of the affected area, tearing, and redness and swelling of the eyes. Prolonged skin contact may result in defatting and cracking of the skin. The mixture may cause or promote the development of cancer in humans. Handling of hot (heated) product may result in thermal burns, typically manifested by pain and redness of the skin and, in more severe cases, by blister formation.

11.1.4. Interactive effects

No interactive effects are expected under intended conditions of use.

11.1.5. Toxicokinetics (absorption, metabolism, distribution and elimination)

Studies have shown that both aromatic and aliphatic components are absorbed through the skin, with aromatic hydrocarbons penetrating the skin barrier more rapidly than aliphatic components. Following absorption, the individual components are distributed via the bloodstream to various tissues and organs. Higher concentrations have been detected particularly in adipose tissue, blood, liver and kidneys, which is consistent with the lipophilic nature of these hydrocarbons.

Data from inhalation studies indicate that the more volatile kerosene constituents are readily absorbed through the respiratory tract. Following absorption, they are preferentially distributed to adipose tissue. Aromatic hydrocarbons are metabolised more rapidly than naphthenic and aliphatic hydrocarbons. Metabolic

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

transformation occurs predominantly in the liver, resulting in the formation of more polar metabolites that may subsequently be excreted in urine and, to a lesser extent, in faeces.

Following ingestion, gastrointestinal absorption is slow and incomplete, resulting in relatively low bioavailability. Based on available experimental data, the mixture is not expected to exhibit significant bioaccumulation potential.

11.2. Information on other hazards

None of the components of the mixture is included in the Candidate List pursuant to Article 59(1) of Regulation (EC) No 1907/2006 (REACH), either due to endocrine-disrupting properties or for any other reason.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Data for the mixture component **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9):

Aquatic compartment (including sediment)	fish	LL ₅₀ (96 h, mortality; WAF): 2 – 5 mg/l NOEL (96 h, mortality; WAF): 2 mg/l NOEL (28 d, mortality): 0,098 mg/l	<i>Oncorhynchus mykiss</i>
	aquatic invertebrates	EL ₅₀ (48 h, mobility; WAF): 1,4 mg/l NOEL (48 h, mobility; WAF): 0,3 mg/l EL ₅₀ (21 d, reproduction; WAF): 0,89 mg/l NOEL (21 d, reproduction; WAF): 0,48 mg/l	<i>Daphnia magna</i>
	algae and aquatic plants	EL ₅₀ (72 h, average specific growth rate; WAF): 1 – 3 mg/l NOEL (48 h, cell number; WAF): 1 mg/l	<i>Raphidocelis subcapitata</i>
	sediment organisms	In accordance with Column 2 of Annex X, these studies are not required, as the chemical safety assessment (based on equilibrium partitioning) does not indicate the need for further testing. This is a UVCB substance; the hydrocarbon block method is used for environmental risk assessment.	
Terrestrial compartment	soil macro-organisms	In accordance with Column 2 of Annex IX, these studies are not required, as the hazard has already been sufficiently assessed using the equilibrium partitioning (EqP) method. This is a UVCB substance; the hydrocarbon block method is applied for environmental risk assessment.	
	soil arthropods		
	terrestrial plants		
	soil micro-organisms		
Atmospheric compartment		No relevant data available.	
Microbiological activity in sewage treatment systems	activated sludge	LL ₅₀ (72 h, growth inhibition): 677,9 mg/l NOEL (72 h, growth inhibition): 1,641 mg/l	<i>Tetrahymena pyriformis</i>

Data for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4)

Aquatic compartment	fish	LL ₅₀ (96 h; WAF): 1000 mg/l	<i>Oncorhynchus mykiss</i>
	aquatic invertebrates	EL ₅₀ (48 h; WAF): >100 mg/l	<i>Daphnia magna</i>
		NOEC (21 d): 1 mg/l	

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

	algae and aquatic plants	EL ₅₀ (72 h; WAF): >100 mg/l	–
Microbiological activity in sewage treatment systems	activated sludge	EC ₅₀ (3h): >1000 mg/l	–

Note 1: Explanation of the abbreviations EL₅₀, LL₅₀, NOEC, NOEL and WAF is given in Section 16.

Note 2: Values presented in the tables are nominal (calculated) values.

12.2. Persistence and degradability

Information for the mixture component **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9):

Hydrolysis: In accordance with Section 2 of Annex XI to Regulation (EC) No 1907/2006 (REACH), testing is technically not feasible, as this UVCB substance does not contain functional groups subject to hydrolysis. The substance consists exclusively of chemical constituents composed of carbon and hydrogen atoms and therefore does not contain hydrolysable groups. Consequently, the substance has a very low potential for hydrolysis and this degradation process does not contribute to its removal from the environment.

Phototransformation in air, water and soil: No relevant information available.

Biodegradation in water, sediment and soil: Standard biodegradability tests are not technically suitable for petroleum UVCB substances, as individual hydrocarbon constituents exhibit widely differing biodegradation rates and it is therefore not possible to determine a single degradation half-life for the UVCB substance as a whole. In accordance with Section 1.3 of Annex XI to REACH, testing of the whole UVCB substance is therefore not required; this endpoint is assessed using validated QSAR models (in particular BioHCWin within EPISuite).

Calculated degradation half-lives (DT₅₀ at 20 °C) for individual constituents of this substance range from 1.02 to 661,986 days. It should be noted that this represents the full range of predicted values and may be misleading or not representative of the properties of the UVCB substance as a whole. Available experimental studies for petroleum fractions (e.g. substances with CAS Nos. 8008-20-6 and 64742-94-5) demonstrate a certain degree of biodegradability, for example degradation of 58.6–61 % (based on theoretical oxygen demand; activated sludge) after 28 days. Within the 10-day window, a biodegradation level of 48 % was observed (OECD 301 F).

Summary: The product is not classified as readily biodegradable but is inherently biodegradable, as microorganisms are capable of degrading hydrocarbons in the kerosene fraction C₉–C₁₆. Assessment of representative hydrocarbon structures indicates some structures that may meet the criteria for P or vP. However, due to the complex composition of this substance, its overall biodegradability cannot be readily estimated using quantitative structure–biodegradability relationship models.

Information for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4):

The substance is generally readily biodegradable. No significant reaction occurs in water.

12.3. Bioaccumulative potential

Information for the mixture component **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9):

Bioaccumulation in the aquatic environment: Standard bioaccumulation studies are not applicable to petroleum UVCB substances and, in accordance with Section 1.3 of Annex XI to REACH, testing is therefore not scientifically necessary. Nevertheless, this endpoint was calculated for representative hydrocarbon structures using the BCFWIN v2.16 model within EPISuite 3.12, as input for the hydrocarbon block method integrated in the PETRORISK model. Predicted bioconcentration factor (BCF) values for hydrocarbons are generally overly conservative, as biotransformation is not quantitatively taken into account (and BCF values may therefore be overestimated).

Calculated BCF values (fish) for individual constituents of this UVCB substance range from 0.4 to 19,200 L/kg. It should be noted that this represents the full range of predicted values and may be highly misleading or not representative of the properties of the UVCB substance as a whole.

Bioaccumulation in the terrestrial environment: No relevant information available.

Summary: Given that the n-octanol/water partition coefficient (log Kow) ranges from 1.99 to 18.02 (partly > 3), a strong bioaccumulation potential of the product is assumed. Assessment of representative hydrocarbon structures indicates some structures that may meet the criteria for B or vB.

Information for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4):

Bioaccumulation of the substance is expected (log Kow: 6.2–7.5).

12.4. Mobility in soil

Information for the mixture component **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9):

Adsorption/desorption: Standard adsorption/desorption studies are not applicable to petroleum UVCB substances and, in accordance with Section 1.3 of Annex XI to REACH, testing is therefore not scientifically necessary. This endpoint was therefore addressed using QSAR calculations for relevant constituents. Calculated log Koc values for individual constituents of this substance range from 1.71 to 14.70. It should be noted that this represents the full range of predicted values and may be misleading or not representative of the properties of the UVCB substance as a whole.

Volatilisation: No relevant information available.

Summary: Given that the organic carbon–water partition coefficient (log Koc) ranges from 1.71 to 14.70 (partly > 3), strong sorption of the product in soil is expected.

Information for the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4):

The substance evaporates slowly and is poorly soluble in water. It contains constituents that bind to particles and are therefore retained in soil. Log Koc > 5.6 (OECD 121).

12.5. Results of PBT and vPvB assessment

The hydrocarbon-type UVCB substance **Kerosine (petroleum), hydrodesulfurized** (EC No. 265-184-9) cannot be assessed as a whole against the criteria of Annex XIII to Regulation (EC) No 1907/2006 (REACH). Therefore, an assessment of representative constituents was performed with the following conclusion: Based on currently available experimental and model data, none of the identified constituents of this UVCB substance simultaneously meets the criteria for persistence, bioaccumulation and toxicity (PBT), nor the criteria for very persistent and very bioaccumulative (vPvB).

For the mixture component **Renewable hydrocarbons (kerosene type fraction); HEFA** (EC No. 931-082-4), the PBT assessment based on currently available data indicates that the PBT/vPvB criteria are not met.

Furthermore, none of the components of the mixture contains PBT/vPvB substances included in the SVHC Candidate List at concentrations above 0.1 %. No additional representative hydrocarbon structures meeting the PBT/vPvB criteria were identified.

The product is therefore not identified as a PBT or vPvB substance.

Note: Explanation of the abbreviations PBT and vPvB is given in Section 16.

12.6. Endocrine disrupting properties

None of the components of the mixture is included in the Candidate List pursuant to Article 59(1) of REACH, either due to endocrine-disrupting properties or for any other reason.

12.7. Other adverse effects

The product forms a continuous film on the water surface, preventing oxygen transfer. Within the meaning of Annex 1 to Act No. 254/2001 Coll. (Water Act), the product is considered a hazardous pollutant.

The product does not contain ozone-depleting substances as defined by the Montreal Protocol and its Copenhagen Amendment.

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

In cases where disposal of product residues is necessary (e.g. unused product or product released during an incident), applicable European Union legislation as well as national and local regulations shall be observed. Waste shall be handed over to an authorised waste management facility.

Recommended waste classification is given in accordance with Commission Decision 2014/955/EU amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council.

13.1.1. Waste catalogue codes according to the European Waste Catalogue (EWC)

Waste code for product that has become waste:

- 13 07 01* fuel oil and diesel
- 07 01 04* other organic solvents, washing liquids and mother liquors
- 16 03 05* organic wastes containing hazardous substances

Waste code for released product absorbed on absorbent material (e.g. absorbent granules):

- 15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances

Waste code for soil contaminated by released product:

- 17 05 03* soil and stones containing hazardous substances

13.1.2. Recommended waste removal method

Dispose of unusable product residues via an authorised waste contractor holding the appropriate permits. Recommended treatment method: energy recovery (incineration). In the case of soil contaminated by released product, biodegradation followed by landfilling may be applied, in accordance with applicable legislation.

13.1.3. Recommended methods of contaminated containers disposal

Not applicable. The product is not supplied in packaged form. Aviation kerosene is typically delivered in rail or road tank vehicles. Decontamination of such tanks is governed by the applicable ADR/RID regulations.

13.1.4. Measures for limiting exposure during waste handling

Never discharge product residues intended for disposal, or product released during an incident or accident, into sewers. Proceed in accordance with the instructions given in Section 6 (Accidental release measures) and subsection 8.2 (Exposure controls/personal protection), and comply with all applicable legal requirements for the protection of persons, air and water.

NOTICE: The information provided above is advisory in nature and applies to the supplied, unused material only. In accordance with applicable waste legislation, full responsibility for waste management, including waste classification by type and hazard, lies with the waste producer.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

1863

14.2. UN proper shipping name

FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

3

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0) Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999
---	--	---

14.4. Packing group

III

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable. The product is transported in rail tank wagons, road tank vehicles or via pipelines.

14.8. Other information

Hazard identification number: 30

Classification code: F1

Label(s): 3



+ environmentally hazardous substance mark

SECTION 15: REGULATORY INFORMATION

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

15.1.1. European Union

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

the components of the product have been fully registered as substances.

AUTHORISATION (TITLE VII OF REACH REGULATION):

*the components of the product are not included in Annex XIV to Regulation (EC) No 1907/2006 (REACH);
 therefore, the authorisation requirement does not apply;*

none of the components of the mixture is included in the Candidate List pursuant to Article 59(1) of REACH.

RESTRICTION (TITLE VIII OF REACH REGULATION):

the product shall not be placed on the market for supply to the general public, with the exception of cosmetic products, medicinal products and fuels as specifically defined in entry No. 28 of Annex XVII to Regulation (EC) No 1907/2006 (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP), as amended

CLASSIFICATION, LABELLING AND PACKAGING:

the product has been classified in accordance with this Regulation. Obligations related to packaging and labelling of hazardous chemical products apply only where the product is placed on the market in packaging subject to labelling requirements under the CLP Regulation.

POISON CENTRES NOTIFICATION (PCN):

the product is a hazardous mixture subject to notification obligations under Article 45 of the CLP Regulation. The required information on the hazardous mixture has been submitted via the ECHA Submission Portal – Poison Centres Notification (PCN).

Regulation (EC) No 649/2012 of the European Parliament and of the Council (PIC), as amended

the product is not subject to any specific restrictions on export or import

15.1.2. Czech Republic

Act No. 350/2011 Coll., on chemical substances and chemical mixtures, as amended

Act No. 258/2000 Coll., on the protection of public health, as amended

Act No. 254/2001 Coll., on waters (Water Act), as amended

Act No. 201/2012 Coll., on air protection, as amended

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

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

Decree No. 8/2021 Coll., on the Waste Catalogue and evaluation of waste properties, as amended
Government Regulation No. 361/2007 Coll., laying down conditions for the protection of health at work, as amended
Act No. 224/2015 Coll., on the prevention of major accidents caused by selected hazardous chemical substances or mixtures, as amended

15.2. Chemical safety assessment

Chemical safety assessments have been carried out during the registration of the mixture components. The product meets the criteria for classification as hazardous in accordance with Regulation (EC) No 1272/2008 (CLP). Exposure assessment and subsequent risk characterisation have been performed.

Information on safe handling of the mixture is incorporated throughout this safety data sheet (Sections 1 to 16).

SECTION 16: OTHER INFORMATION

Changes made in the revision

Changes introduced in this version of the safety data sheet are indicated by a black-red vertical line in the left margin of the text.

The original UFI code (9110-V0T5-300J-RQFW) was changed due to a modification of the composition of this mixture in April 2026.

Abbreviations and acronyms used in the text

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
bw	Body weight
CAS	Substance identification number assigned by the Chemical Abstracts Service of the American Chemical Society
CLP	Regulation (EC) No 1272/2008 of the European Parliament and of the Council on the Classification, Labelling and Packaging of substances and mixtures, implementing the United Nations Globally Harmonized System (GHS) in EU legislation
CMR	Carcinogenic, mutagenic or toxic for reproduction
CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level (exposure level corresponding to a low but theoretically possible risk acceptable for non-threshold effects)
DNEL	Derived No-Effect Level (exposure level below which no adverse effects on human health are expected)
DT ₅₀	Degradation half-life (disappearance time)
DW	Data waiving
EC	Official European Union substance identification number: EINECS – European Inventory of Existing Commercial Chemical Substances ELINCS – European List of Notified Chemical Substances NLP – No Longer Polymer
EC ₅₀	Effect concentration causing immobilisation/effect in 50 % of test organisms
ECHA	European Chemicals Agency
ED ENV	Endocrine disruptor for the environment

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

ED HH	Endocrine disruptor for human health
EEA	European Economic Area
EL ₅₀	Effective loading rate causing immobilisation in 50 % of test organisms
EN (ISO)	European Standard (possibly adopted on the basis of international standards)
EP	European Parliament
EqP	Equilibrium partitioning method
EU	European Union
HEFA	Hydrotreated Esters and Fatty Acids
HSDB	Hazardous Substances Data Bank
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IC ₅₀	Inhibition concentration causing inhibition in 50 % of test organisms
ICAO	International Civil Aviation Organization
ICE	Intervention in Chemical transport Emergencies programme
IČO	Company identification number (company ID No.) in the Czech Republic
IMDG	International Maritime Dangerous Goods Code
IMO	International Maritime Organization
ISO	International Organization for Standardization
Jet A-1	Designation for civil aviation kerosene used as turbine engine fuel
LC ₅₀ /LD ₅₀	Lethal concentration / lethal dose causing death in 50 % of test organisms
LL ₅₀	Effective loading rate causing 50 % mortality (lethal loading rate)
LOEC/LOEL	Lowest Observed Effect Concentration / Level
log K _{oc}	Common logarithm of the organic carbon- water partition coefficient
log K _{ow}	Common logarithm of the n-octanol/water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
M-factors	Multiplication factors
nf	Not feasible
NOAEC/NOAEL	No Observed Adverse Effect Concentration / Level
NOEC/NOEL	No Observed Effect Concentration / Level
NPK-P	The highest permitted concentration of the chemical substance in the air (the concentration of the substance that a worker may be exposed to for a maximum of 15 minutes but which must never be exceeded)
OECD	Organisation for Economic Co-operation and Development
PBT; vPvB	Persistent, Bioaccumulative and Toxic; very Persistent and very Bioaccumulative
PCN	Poison Centre Notification

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

PEL	Permitted exposure limit of the chemical substance in the air (the exposure value that an employee may be exposed to during the entire working shift (8 hours), without endangering his health during lifetime occupational exposure)
PMT; vPvM	Persistent, Mobile and Toxic; Very Persistent, Very Mobile
PNEC	Predicted No-Effect Concentration
PPE	Personal Protective Equipment
QSAR	(Quantitative) Structure–Activity Relationship
REACH	Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SAF	Sustainable Aviation Fuel
SCL	Specific Concentration Limits
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
STP	Sewage treatment plant
su	Scientifically unjustified
TIS	Toxicological Information Centre (Czech Republic)
TRINS	Transport Information and Emergency Response System
UACRON	Chemical database (The University of Akron)
UFI code	Unique Formula Identifier for hazardous mixtures
UN	United Nations
UN number	Four-digit identification number assigned to dangerous goods under the UN Model Regulations
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
WAF	Water-accommodated fraction

Method of classification of the mixture

The mixture was classified using the calculation method based on information on its composition and on the hazardous properties of its components.

The flammability of the mixture was assessed on the basis of the measured flash point and the boiling range. Effects on human health and on the aquatic environment were assessed using the procedures laid down in Annex I to the CLP Regulation for the classification of mixtures, taking into account the known classification of the components and their known concentrations in the mixture.

Sources of data used in the preparation of the safety data sheet

Annexes I, IV, VI and VII to Regulation (EC) No 1272/2008 of the European Parliament and of the Council (CLP), as amended

Principles of providing first aid in case of exposure to chemical substances (doc. MUDr. Daniela Pelclová et al.)

Substance registration dossiers according to Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH), as amended

Safety data sheets for hydrogenated kerosene and HEFA



AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

Full text of hazard statements (H-statements), EUH-statements and hazard class abbreviations referred to in Sections 2 and/or 3

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
Asp. Tox.	Aspiration hazard
Aquatic Chronic	Hazardous to the aquatic environment – chronic hazard
Carc.	Carcinogenicity
Flam. Liq.	Flammable liquid
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity – single exposure

Training instructions

Persons handling the product shall be instructed on the risks associated with its handling and on the requirements for the protection of human health and the environment (see relevant provisions of the Labour Code).

Access to information

In accordance with Article 35 of Regulation (EC) No 1907/2006 (REACH), every employer shall grant access to the information contained in the safety data sheet to all workers who use this product or may be exposed to its effects during their work, as well as to their representatives.

Occupational exposure limit values for EU countries (see point 8.1.1)

Data for diesel fuel / solvent diesel (CAS No. 68334-30-5) and HEFA (EC No. 931-082-4):

Country	8-hour limit [mg/m ³]	short-term limit [mg/m ³]
European Union (Regulation No. 2000/39/ES, as amended)	no limit values for the given substances have been defined	
Germany		
Poland		
Slovakia		
Hungary		

8-hour limit: measured or calculated with respect to an eight-hour reference period as a time-weighted average

short-term limit: a limit value above which exposure should not occur and which corresponds to a 15-minute period

Emergency telephone number for EU and EEA countries (see subsection 1.4)

National Centres	Telephone	Institution / Website / E-mail
Austria	+43 1 406 43 43	Austrian Poison Information Centre (Vergiftungsinformationszentrale-VIZ) https://goeg.at/viz
Belgium	+32 070 245 245	Centre Antipoisons, c/o Hôpital Militaire Reine Astrid Rue Bruyn 1, 1120 Bruxelles http://www.centreatipoisons.be/
Bulgaria	+359 2 9154 233 +359 2 9154 411	National Toxicology Center, Hospital for Active Medical Treatment and Emergency Medicine "N.I.Pirogov" http://www.pirogov.bg/ e-mail: poison_centre@mail.orbitel.bg
Croatia	+385 1 2348 342	Poison Control Centre / Centar za kontrolu otrovanja Ksaverska cesta 2, POB 291, 10000 Zagreb https://www.imi.hr/en/

AVIATION KEROSENE SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

National Centres	Telephone	Institution / Website / E-mail
Cyprus	+357 22405611; 1401	http://www.mlsi.gov.cy/
Czech Republic	+420 224 91 92 93 +420 224 91 54 02	Toxikologické informační středisko (TIS) Na bojišti 1, 120 00 Praha 2 http://www.tis-cz.cz/ e-mail: tis@vfn.cz
Denmark	+45 82 12 12 12 112	Giftlinjen at Bispebjerg Hospital Bispebjerg Bakke 23E, opgang 20 C 2400 København NV http://www.giftlinjen.dk/
Estonia	+372 7943 794 112	Poisoning Information Centre Osmussaare 2, Tallinn 13811 Hotline: 16662 https://www.terviseamet.ee/en/chemical-and-product-safety/data-for-safety-data-sheet
Finland	+358 0800 147 111	Finnish Poison Information Center HUS (Helsinki University Hospital)
France – Orfila (INRS)	+33 (0)1 45 42 59 59	Centres Antipoison et de Toxicovigilance (CapTv) Hôpital Fernand Widal 200 rue du Faubourg Saint Denis 75010 PARIS www.centres-antipoison.net viviane.damboise@lrh.aphp.fr
France - Angers	+33 02 41 48 21 21	http://www.centres-antipoison.net/angers/index.html
France - Bordeaux	+33 05 56 96 40 80	http://www.centres-antipoison.net/bordeaux/index.html
France - Lille	+33 08 00 59 59 59	http://www.centres-antipoison.net/lille/index.html
France - Lyon	+33 04 72 11 69 11	http://www.centres-antipoison.net/lyon/index.html
France - Marseille	+33 04 91 75 25 25	http://www.centres-antipoison.net/marseille/index.html
France - Nancy	+33 03 83 22 50 50	http://www.centres-antipoison.net/nancy/index.html
France - Paris	+33 01 40 05 48 48	http://www.centres-antipoison.net/paris/index.html
France - Toulouse	+33 05 61 77 74 47	http://www.centres-antipoison.net/toulouse/index.html
Germany	+49 116117 112	Bundesinstitut für Risikobewertung
Germany - Berlin	+49 030 - 19240	Giftnotruf der Charité Universitätsmedizin Berlin Campus Mitte Charitéplatz 1 10117 Berlin https://giftnotruf.charite.de e-mail: giftnotruf@charite.de
Germany - Bonn	+49 0228 – 19240	Informationszentrale gegen Vergiftungen am Universitätsklinikum Bonn Zentrum für Kinder- und Jugendmedizin Venusberg Campus 1 53127 Bon http://www.gizbonn.de/ e-mail: gizbn@ukbonn.de
Germany - Erfurt	+49 0361 - 730730	Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg- Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen c/o HELIOS Klinikum Erfurt GmbH Nordhäuser Straße 74 99089 Erfurt http://www.ggiz-erfurt.de e-mail: ggiz@ggiz-erfurt.de
Germany - Freiburg	+49 0761 - 19240	Vergiftungs-Informations-Zentrale Universitätsklinikum Freiburg Klinik für Allgemeine Kinder- und Jugendmedizin Kinder- und Jugendklinik Freiburg Breisacher Str. 86b 79110 Freiburg http://www.uniklinik-freiburg.de/giftberatung.html e-mail: giftinfo@uniklinik-freiburg.de
Germany - Göttingen	+49 0551 - 19240	Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) Universitätsmedizin Göttingen Georg-August-Universität Robert- Koch-Straße 40 37075 Göttingen http://www.giz-nord.de/ e-mail: giz-nord.info@med.uni-goettingen.de
Germany - Mainz	+49 06131 - 19240	Giftinformationszentrum Mainz – Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen sowie für das Saarland Klinische Toxikologie Universitätsmedizin der Johannes Gutenberg-Universität Langenbeckstraße 1 Gebäude 601 55131 Mainz http://www.giftinfo.uni-mainz.de e-mail: GIZ.mail@unimedizin-mainz.de

AVIATION KEROSENE

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH),
as amended, and Commission Regulation (EU) No. 2020/878

Valid Issue: 31. 07. 2026 – version 10(0)

Revision: 31. 07. 2026 – version 10(0)

Replaces: 24. 04. 2023 – version 9(1)

First issue: 10. 12. 1999

National Centres	Telephone	Institution / Website / E-mail
Germany - Munich	+49 089 - 19240	Giftnotruf München Abteilung für Klinische Toxikologie und Giftnotruf München TUM Klinikum Rechts der Isar Ismaninger Straße 22 81675 München https://toxikologie.mri.tum.de/ e-mail: tox@mri.tum.de
Greece	+30 2107793777	Poison Information Centre Children's Hospital "P&A Kyriakou" Athens 11527 e-mail: poison_ic@aglaiaikyriakou.gr
Hungary	+36 80 201 199 +36 1 476 6464	Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ) Albert Flórián út 2-6, H-1097 Budapest https://www.nnk.gov.hu/index.php/kemiai-biztonsagi-es-kompetens-hatosagi-fo/egeszsegugyi-toxikologiai-tajekoztato-szolgalat E-mail: ettsz@nnk.gov.hu
Iceland	+354 543 1000 +354 543 2222 112	Landspítali – The National University Hospital https://www.landspitali.is/sjuklingar-adstandendur/deildir-og-thjonusta/eitrunarmidstod/ e-mail: eitur@landspitali.is
Ireland	+353 (1) 809 2166	National Poisons Information Centre Beaumont Hospital Beaumont Dublin 9 https://www.poisons.ie/ e-mail: chemicalsinfo@beaumont.ie
Italy - Bergamo	+39 800883300	Istituto Superiore di sanità – Preparati Pericolosi helpdesk.clp@iss.it
Italy - Florence	+39 055-7947819	
Italy - Foggia	+39 800183459	
Italy - Milan	+39 02-66101029	
Italy - Naples	+39 081-5453333	
Italy - Pavia	+39 0382-24444	
Italy - Rome	+39 06-49978000 +39 06-3054343 +39 06-68593726	
Italy - Verona	+39 800011858	
Latvia	+371 67042473 112	Toksikoloģijas un sepses klīnikas Saindēšanās un zāļu informācijas centrs, Hipokrāta 2 Rīga, Latvija, LV-1038; Valsts ugunsdzēsības un glābšanas dienests https://www.meteo.lv/en/lapas/environment/chemical-substances-/reach/reach_en?&id=1483&nid=410
Lithuania	+370 (5) 236 2052	Apsinuodijimų informacijos biuras http://www.apsinuodijau.lt
Luxembourg	+352 8002 5500	Centre Antipoisons, c/o Hôpital Militaire Reine Astrid Rue Bruyn 1, 1120 Bruxelles, Centre Antipoisons de Bruxelles http://www.centreatipoisons.be
Malta	112	https://deputyprimeminister.gov.mt/en/Pages/health.aspx
Netherlands	+31 088 755 8000	Nationaal Vergiftigingen Informatie Centrum (NVIC) http://www.vergiftigingen.info/
Norway	+47 22 59 13 00	Norwegian Poison Information Centre https://www.helsenorge.no/en/poison-information
Poland	+48 12 411 99 99	Pracownia Informacji Toksykologicznej i Analiz Laboratoryjnych Uniwersytetu Jagiellońskiego ul. Jakubowskiego 2 30-688 Krakow Poland https://oit.cm.uj.edu.pl/dzialalnosc-uslugowa
Portugal	+351 800 250 250	CIAV - Centro de Informação Antivenenos
Romania	+40 213183606	
Slovakia	+421 2 5477 4166 +421 911 166 066	NÁRODNÉ TOXIKOLOGICKÉ INFORMAČNÉ CENTRUM (NTIC) Limbová 5 833 05 Bratislava http://www.ntic.sk/ e-mail: ntic@ntic.sk

	AVIATION KEROSENE SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006 (REACH), as amended, and Commission Regulation (EU) No. 2020/878	Valid Issue: 31. 07. 2026 – version 10(0)
		Revision: 31. 07. 2026 – version 10(0) Replaces: 24. 04. 2023 – version 9(1) First issue: 10. 12. 1999

National Centres		Telephone	Institution / Website / E-mail
Slovenia		☎ 112 ☎ +386 1 522 1293	Centre for Clinical Pharmacology and Toxicology Division of Internal Medicine University Medical Centre Ljubljana Zaloška cesta 7 1525 Ljubljana Slovenia www.kclj.si e-mail: gp.ukc@kclj.si
Spain		☎ +34 91 562 04 20	Servicio de Información Toxicológica (SIT) Instituto Nacional de Toxicología y Ciencias Forenses (INTCF) C/José Echegaray nº4 28232 Las Rozas de Madrid Madrid e-mail: sit@mju.es ; intcf@justicia.es
Sweden		☎ 112 (begär Giftinformation)	Swedish Poisons Information Centre Giftinformationscentralen 171 76 Stockholm Sweden https://giftinformation.se/servicemeny/in-english/ e-mail: giftinformation@gic.se

Disclaimer: This safety data sheet has been prepared in accordance with Regulation (EC) No 1907/2006 (REACH). It contains information necessary to ensure occupational health and safety and environmental protection. The information is provided in good faith, reflects the current state of knowledge and experience, and is in compliance with applicable legislation. The information provided does not replace product quality specifications and shall not be construed as a guarantee of suitability or fitness of the product for any specific application. It is the responsibility of the user of the product to assess the relevance and applicability of the information for the specific use, as product properties may be affected by various factors. Compliance with applicable regional legal requirements remains the responsibility of the recipient.