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

1.1. Product identifier


Product form	: Substance
Trade name/designation	: JET A-1
Chemical name	: Straight run kerosine
EC Index	: 649-404-00-4
EC No	: 232-366-4
CAS No.	: 8008-20-6
REACH registration No	: 01-2119485517-27-0133
Product group	: Trade product

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use, Consumer use
Use of the substance/mixture	: Fuels see attached exposure scenario

Title	Use descriptors
Use as an intermediate (ES Ref.: 02)	SU3, SU8, SU9, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15, ERC6a, ESVOC SPERC 6.1a.v1
Distribution of substance (ES Ref.: 03)	SU3, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15, ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7, ESVOC SPERC 1.1b.v1
Formulation & (re)packing of substances and mixtures (ES Ref.: 04)	SU3, SU10, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15, ERC2, ESVOC SPERC 2.2.v1
Uses in coatings (ES Ref.: 05)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15, ERC4, ESVOC SPERC 4.3a.v1
Industrial use in cleaning agents (ES Ref.: 08)	SU3, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13, ERC4, ESVOC SPERC 4.4a.v1
Lubricants (ES Ref.: 11)	SU3, PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18, ERC4, ERC7, ESVOC SPERC 4.6a.v1
Metal working fluids / rolling oils (ES Ref.: 16)	SU3, PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, ERC4, ESVOC SPERC 4.7a.v1
Use as binders and release agents (ES Ref.: 18)	SU3, PROC1, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8b, PROC10, PROC13, PROC14, ERC4, ESVOC SPERC 4.10a.v1
Use as a fuel in industrial settings (ES Ref.: 22)	SU3, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16, ERC7, ESVOC SPERC 7.12a.v1
Functional fluids (ES Ref.: 25)	SU3, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, ERC7, ESVOC SPERC 7.13a.v1
Uses in coatings (ES Ref.: 06)	SU22, PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC19, ERC8a, ERC8d, ESVOC SPERC 8.3b.v1
Professional use in cleaning agents (ES Ref.: 09)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC10, PROC11, PROC13, ERC8a, ERC8d, ESVOC SPERC 8.4b.v1
Lubricants: Low environmental release (ES Ref.: 12)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC9a, ERC9b, ESVOC SPERC 9.6b.v1
Lubricants: High environmental release (ES Ref.: 13)	SU22, PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20, ERC8a, ERC8d, ESVOC SPERC 8.6c.v1
Metal working fluids / rolling oils (ES Ref.: 17)	SU22, PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, ERC8a, ERC8d, ESVOC SPERC 8.7c.v1
Use as binders and release agents (ES Ref.: 19)	SU22, PROC1, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b, PROC10, PROC11, PROC14, ERC8a, ERC8d, ESVOC SPERC 8.10b.v1

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Title	Use descriptors
Use in agrochemicals (ES Ref.: 20)	SU22, PROC1, PROC2, PROC4, PROC8a, PROC8b, PROC11, PROC13, ERC8a, ERC8d, ESVOC SPERC 8.11a.v1
Use as a fuel in professional settings (ES Ref.: 23)	SU22, PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16, ERC9a, ERC9b, ESVOC SPERC 9.12b.v1
Road and construction applications (ES Ref.: 26)	SU22, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, ERC8d, ERC8f, ESVOC SPERC 8.15.v1
Explosives manufacture & use (ES Ref.: 27)	SU22, PROC1, PROC3, PROC5, PROC8a, PROC8b, ERC8e
Uses in coatings (ES Ref.: 07)	SU21, PC1, PC4, PC5, PC9a, PC9b, PC9c, PC10, PC15, PC18, PC23, PC24, PC31, PC34, ERC8a, ERC8d, ESVOC SPERC 8.3c.v1
Use in cleaning agents (ES Ref.: 10)	SU21, PC3, PC4, PC8, PC9a, PC24, PC35, PC38, ERC8a, ERC8d, ESVOC SPERC 8.4c.v1
Lubricants: Low environmental release (ES Ref.: 14)	SU21, PC1, PC3, PC4, PC6, PC24, PC31, ERC9a, ERC9b, ESVOC SPERC 9.6d.v1
Lubricants: High environmental release (ES Ref.: 15)	SU21, PC1, PC3, PC4, PC6, PC24, PC31, ERC8a, ERC8d, ESVOC SPERC 8.6e.v1
Use in agrochemicals (ES Ref.: 21)	SU21, PC12, PC22, PC27, ERC8a, ERC8d, ESVOC SPERC 8.11b.v1
Use as a fuel (ES Ref.: 24)	SU21, PC13, ERC9a, ERC9b, ESVOC SPERC 9.12c.v1

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Supplier

NIS a.d. Novi Sad
 Narodnog Fronta 12
 21000 Novi Sad - Serbia
 T + 381 (0) 21 481 1111
Dragana.Cvetkov@nis.eu (Responsible person SDS/REACH)

Only Representative

REACH Law Ltd.
 Vänrikinkuja 3 JK 21
 02600 Espoo - Finland
 T +358(0) 9 412 3055 - F +358 (0) 9 412 3049
sds@reachlaw.fi


Manufacturer

NIS a.d. Novi Sad
 Narodnog Fronta 12
 21000 Novi Sad - Serbia
 T + 381 (0) 21 481 1111
Dragana.Cvetkov@nis.eu (Responsible person SDS/REACH)

1.4. Emergency telephone number

Emergency number : + 381 (0) 21 481 1111 (08-16h) + 381 (0)11 360 8440 (24 h) + 381 (0)11 266 1122 (24 h) + 381 (0)11 266 2755 (24 h)

Country	Official advisory body	Address	Emergency number
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	+353 1 809 21 66 (public, 8am - 10pm, 7/7) +353 01 809 2566 (Professionals, 24/7)
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours, healthcare professionals only)

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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
 Skin Irrit. 2 H315
 Asp. Tox. 1 H304
 Aquatic Chronic 2 H411
 STOT SE 3 H336

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

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

Hazard pictograms :



Signal word :

Danger

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/sparks/open flames/hot surfaces. - No smoking.
 P280 - Wear protective gloves/ protective clothing.
 P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/.
 P331 - Do NOT induce vomiting.
 P501 - Dispose of contents/container to.

Listed in Annex VI :

EC index no : 649-404-00-4

2.3. Other hazards


This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance name : Kerosine
 CAS No. : 8008-20-6
 EC No : 232-366-4
 EC Index : 649-404-00-4

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Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Kerosine (petroleum)	(CAS No.) 8008-20-6 (EC No) 232-366-4 (EC Index) 649-404-00-4	100	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice	: First aider: Pay attention to self-protection. See also section 8 . Treat symptomatically. Never give anything by mouth to an unconscious person or a person with cramps. Show this safety data sheet to the doctor in attendance. In case of doubt or persistent symptoms, consult always a physician.
Inhalation	: Keep at rest. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
Skin contact	: Take off immediately all contaminated clothing. Wash with plenty of water/. In case of doubt or persistent symptoms, consult always a physician. Wash contaminated clothing before reuse.
Eyes contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
In case of ingestion	: Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Get medical advice/attention.

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

Inhalation	: May cause respiratory irritation. Cough. The following symptoms may occur:
Skin contact	: Irritating to skin. The following symptoms may occur: erythema (redness).
Eyes contact	: Contact with eyes may cause irritation. The following symptoms may occur: erythema (redness).
Ingestion	: Harmful: may cause lung damage if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

No data available


SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray, Alcohol resistant foam, Carbon dioxide, Dry extinguishing powder.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards	: Flammable liquid and vapour. Vapours can form explosive mixtures with air. Vapours are heavier than air and may spread along floors. Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. The pressure in sealed containers can increase under the influence of heat. Hazardous decomposition products Carbon oxides. Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.
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5.3. Advice for firefighters

Firefighting instructions : Special protective equipment for firefighters. . In case of fire: Wear self-contained breathing apparatus. Use water spray or fog for cooling exposed containers. Evacuate personnel to a safe area. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate personnel to a safe area. Stay upwind/keep distance from source. Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Avoid contact with skin and eyes. Do not breathe vapour/aerosol. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Use only non-sparking tools.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Stop leak if safe to do so. Dam up. Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite or powdered limestone. Collect in closed and suitable containers for disposal. Large spills should be collected mechanically (remove by pumping) for disposal. Dispose of as special waste in compliance with local and national regulations. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling


Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Avoid contact with skin, eyes and clothing. Do not breathe vapour/aerosol. Take precautionary measures against static discharges. Ensure equipment is adequately earthed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take any precaution to avoid mixing with incompatible materials. See also section 10. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow to enter into surface water or drains.

Hygiene measures : Keep good industrial hygiene. When using do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling of the product. Take off contaminated clothing. Keep work clothes separately. Keep away from food, drink and animal feedingstuffs.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Storage of flammable liquids. Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not store near or with any of the incompatible materials listed in section 10.

Packaging materials : Keep/Store only in original container.

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7.3. Specific end use(s)

see attached exposure scenario.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters


Kerosine (petroleum) (8008-20-6)		
Belgium	Limit value (mg/m ³)	200 mg/m ³ (application limited to exposure conditions to negligible aerosols-total hydrocarbon vapor)
Bulgaria	OEL TWA (mg/m ³)	300,0 mg/m ³
Poland	NDS (mg/m ³)	100 mg/m ³
Poland	NDSch (mg/m ³)	300 mg/m ³
Portugal	OEL TWA (ppm)	200 ppm (restricted to conditions in which there are negligible aerosol exposures)
USA - ACGIH	ACGIH TWA (mg/m ³)	200 mg/m ³ (application restricted to conditions in which there are negligible aerosol exposures-total hydrocarbon vapor)
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	100 mg/m ³

JET A-1 (8008-20-6)	
DNEL/DMEL (general population)	
Long-term - systemic effects,oral	19 mg/kg bodyweight/day

Additional information : Recommended monitoring procedures :. Personal monitoring. Concentration measurement in air

8.2. Exposure controls

- Engineering control measures : Provide adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Take precautionary measures against static discharge. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Organisational measures to prevent /limit releases, dispersion and exposure. See also section 7.
- Personal protection equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hand protection : Wear chemically resistant gloves (tested to EN374) . rubber gloves. -. NBR (Nitrile rubber) (EN 374). The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves
- Eye protection : Safety glasses (EN166)
- Body protection : Overalls, apron and boots recommended. (EN 11612, EN 1149)
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140) (EN 136),. Full face mask (EN 136) (EN 140),. Filter type: AP (EN 141). Use self-contained respiratory apparatus for rescue and maintenance work in storage vessels. (EN 137)
- Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.
- Environmental exposure controls : Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: liquid
Colour	: clear.
Odour	: petroleum hydrocarbon odour.
Odour threshold	: No data available No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point/freezing point	: UVCB °C Not applicable
Freezing point	: No data available
Initial boiling point and boiling range	: 90-300 °C
Flash point	: >38 °C
Auto-ignition temperature	: > 220 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable, liquid
Vapour pressure	: 1-21 kPa (37.8°C)
Vapour density	: No data available
Relative density	: No data available
Density	: 0.75-0.86 g/cm ³ (15°C)
Solubility	: Water: UVCB Not applicable
Partition coefficient n-octanol/water	: UVCB Not applicable
Kinematic viscosity	: 1-25 cSt (40 °C) < 8,000 mm ² /s (-20°C)
Dynamic viscosity	: No data available
Explosive properties	: Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
Explosive limits	: No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour. Reference to other sections: 10.5.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Vapours can form explosive mixtures with air.

10.4. Conditions to avoid


Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. See also section 7. Handling and storage.

10.5. Incompatible materials

Oxidising substances. See also section 7. Handling and storage.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Reference to other sections: 5.2.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

Kerosine (petroleum) (8008-20-6)	
LD50/oral/rat	> 5000 mg/kg OECD Test Guideline 401
LD50/dermal/rabbit	> 2000 mg/kg OECD 434
LC50 inhalation rat (Vapours - mg/l/4h)	> 5,28 mg/l/4h OECD Test Guideline 403

Skin corrosion/irritation : Causes skin irritation.

OECD Test Guideline 404

pH: Not applicable

Serious eye damage/eye irritation : Not classified (Based on available data, the classification criteria are not met)

Draize Test

pH: Not applicable

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

OECD Test Guideline 406

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Test Method OECD 475, 478, 479

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

OECD Test Guideline 451

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

OECD 421

OECD 422

STOT-single exposure : May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Kerosine (petroleum) (8008-20-6)	
NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight/day
NOAEC, Inhalation	≥ 24 mg/m ³ (28 days)
NOAEL, Dermal	≥ 400 mg/kg bw/day (28 days)
NOAEL, Inhalation	≥ 1000 mg/m ³ (90 days)
NOAEL, Inhalation	750 mg/kg bw/day (90 days)

Aspiration hazard : May be fatal if swallowed and enters airways.


Other information : Symptoms related to the physical, chemical and toxicological characteristics.
Reference to other sections: 4.2.

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Kerosine (petroleum) (8008-20-6)	
LC50 fish 1	2 - 5 mg/l
EC50 Daphnia 1	1,4 mg/l
ErC50 (algae)	1 - 3 mg/l
NOEC (chronic)	daphnia 0,48 mg/l (NOEL)
NOEC chronic fish	0,098 mg/l
NOEC chronic crustacea	0,48 mg/l

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12.2. Persistence and degradability

JET A-1 (8008-20-6)	
Persistence and degradability	Not applicable. Substance of unknown or variable composition, complex reaction products or biological material (UVCB).

12.3. Bioaccumulative potential

JET A-1 (8008-20-6)	
Partition coefficient n-octanol/water	UVCB Not applicable
Kerosine (petroleum) (8008-20-6)	
Partition coefficient n-octanol/water	study scientifically unjustified

12.4. Mobility in soil

JET A-1 (8008-20-6)	
Surface tension	Not applicable
Ecology - soil	No data available.
Kerosine (petroleum) (8008-20-6)	
Surface tension	not relevant

12.5. Results of PBT and vPvB assessment

JET A-1 (8008-20-6)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods


Waste disposal recommendations	: Handle with care. Safe handling: see section 7. Handling and storage. Refer to manufacturer/supplier for information on recovery/recycling. Collect and dispose of waste product at an authorised disposal facility. Dispose of contaminated materials in accordance with current regulations.
Additional information	: Never use pressure to empty container. Do not burn, or use a cutting torch on, the empty drum. Do not puncture or incinerate. Delivery to an approved waste disposal company. Dispose of contaminated materials in accordance with current regulations.
Further ecological information	: Do not allow to enter into surface water or drains.
List of proposed waste codes/waste designations in accordance with EWC (2001/573/EC, 75/442/EEC, 91/689/EEC)	: Classified as hazardous waste according to European Union regulations Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only suggestions: 13 07 03* - other fuels (including mixtures) 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN number	: 1863
UN-No	: 1863
UN-No	: 1863
UN-No. (ADN)	: 1863
UN-No. (RID)	: 1863

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14.2. UN proper shipping name

Proper Shipping Name : FUEL, AVIATION, TURBINE ENGINE
 Proper Shipping Name (IMDG) : FUEL, AVIATION, TURBINE ENGINE
 Proper Shipping Name (IATA) : Fuel, aviation, turbine engine
 Proper Shipping Name (ADN) : FUEL, AVIATION, TURBINE ENGINE
 Proper Shipping Name (RID) : FUEL, AVIATION, TURBINE ENGINE
 Transport document description (ADR) : UN 1863 FUEL, AVIATION, TURBINE ENGINE, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS
 Transport document description (IMDG) : UN 1863 FUEL, AVIATION, TURBINE ENGINE, 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
 Transport document description (IATA) : UN 1863 Fuel, aviation, turbine engine, 3, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (ADN) : UN 1863 FUEL, AVIATION, TURBINE ENGINE, 3, III, ENVIRONMENTALLY HAZARDOUS
 Transport document description (RID) : UN 1863 FUEL, AVIATION, TURBINE ENGINE, 3, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
 Danger labels (ADR) : 3



IMDG

Transport hazard class(es) (IMDG) : 3
 Danger labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
 Hazard labels (IATA) : 3



ADN

Transport hazard class(es) (ADN) : 3
 Danger labels (ADN) : 3



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RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : ADN : N2

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

Special Provisions : 363, 664

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T2

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : LGBF

Vehicle for tank carriage : FL

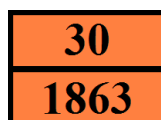
Transport category (ADR) : 3


Special provisions for carriage - Packages (ADR) : V12

Special provisions for carriage - Operation (ADR) : S2

Hazard identification number (Kemler No.) : 30

Orange plates :



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tunnel restriction code : D/E
EAC code : 3YE

- Transport by sea

Special provisions (IMDG) : 223, 363
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T2
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E
Stowage category (IMDG) : A
Properties and observations (IMDG) : Immiscible with water.

- Air transport


PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 363
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

- Rail transport

Classification code (RID) : F1
Special provisions (RID) : 363
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3

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Special provisions for carriage – Packages : W12 (RID)

Colis express (express parcels) (RID) : CE4

Hazard identification number (RID) : 30

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	JET A-1 - Kerosine (petroleum)
3.a. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	JET A-1 - Kerosine (petroleum)
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	JET A-1 - Kerosine (petroleum)
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	JET A-1 - Kerosine (petroleum)
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	JET A-1 - Kerosine (petroleum)

JET A-1 is not on the REACH Candidate List

JET A-1 is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters

Risk classification according to VbF : A II - Liquids with a flashpoint between 21°C and 55°C

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Waterbezwaaarlijkheid : 6 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (A)


SZW-lijst van kankerverwekkende stoffen : Kerosine is listed

SZW-lijst van mutagene stoffen : Kerosine is listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

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Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product


15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

	DNEL = Derived No Effect Level
	Derived Minimal Effect level
	Predicted No Effect Concentration
	Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	time weighted average
	Median lethal concentration
	Median lethal dose
	Median lethal level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	no-observed-effect level
	NOEC = No observed effect concentration
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	European waste catalogue
	Not applicable
	N.O.S. = Not Otherwise Specified
	Volatile organic compounds
	mg/kg bodyweight
	Quantitative structure-activity relationship (QSAR)
	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)
	ABM = Algemene beoordelingsmethodiek

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Sources of key data used to compile the datasheet : European Chemicals Bureau; CSR, SDS supplier.

Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment - chronic hazard category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
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.
ERC1	Manufacture of substances
ERC2	Formulation of preparations
ERC3	Formulation in materials
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
ERC6a	Industrial use resulting in manufacture of another substance (use of intermediates)
ERC6b	Industrial use of reactive processing aids
ERC6c	Industrial use of monomers for manufacture of thermo-plastics
ERC6d	Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
ERC7	Industrial use of substances in closed systems
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8d	Wide dispersive outdoor use of processing aids in open systems
ERC8e	Wide dispersive outdoor use of reactive substances in open systems
ERC8f	Wide dispersive outdoor use resulting in inclusion into or onto a matrix
ERC9a	Wide dispersive indoor use of substances in closed systems
ERC9b	Wide dispersive outdoor use of substances in closed systems
ESVOC SPERC 1.1b.v1	<TX:_Q_9269124915>: <tx:_LS1244> (SU3)
ESVOC SPERC 2.2.v1	Formulation & packing of preparations and mixtures: Industrial (SU10)
ESVOC SPERC 4.10a.v1	Use as binders and release agents: Industrial (SU3)
ESVOC SPERC 4.3a.v1	<TX:_Q_10133224449>: <tx:_LS1244> (SU3)
ESVOC SPERC 4.4a.v1	<TX:_q_11133171103>: <tx:_LS1244> (SU3)
ESVOC SPERC 4.6a.v1	Lubricants: Industrial (SU3)
ESVOC SPERC 4.7a.v1	Metal working fluids and rolling oils: Industrial (SU3)
ESVOC SPERC 6.1a.v1	Manufacture of substances: Industrial (SU8, SU9)
ESVOC SPERC 7.12a.v1	Use as a fuel: Industrial (SU3)
ESVOC SPERC 7.13a.v1	<TX:_q_11133171109>: <tx:_LS1244> (SU3)
ESVOC SPERC 8.10b.v1	Use as binders and release agents: Professional (SU22)
ESVOC SPERC 8.11a.v1	Agrochemical uses: Professional (SU22)
ESVOC SPERC 8.11b.v1	Agrochemical uses: Consumer (SU21)
ESVOC SPERC 8.15.v1	Road and Construction applications: Professional (SU22)
ESVOC SPERC 8.3b.v1	<TX:_q_10133224449>: <tx:_PRODUCT_USE_PROFESSIONAL> (SU22)
ESVOC SPERC 8.3c.v1	<TX:_q_10133224449>: <tx:_CONSUMER> (SU21)
ESVOC SPERC 8.4b.v1	<TX:_q_11133171103>: <tx:_PRODUCT_USE_PROFESSIONAL> (SU22)
ESVOC SPERC 8.4c.v1	<TX:_q_11133171103>: <tx:_CONSUMER> (SU21)
ESVOC SPERC 8.6c.v1	Lubricants: Professional (SU22) - high environmental release
ESVOC SPERC 8.6e.v1	Lubricants: Consumer (SU21) - high environmental release
ESVOC SPERC 8.7c.v1	Metal working fluids and rolling oils: Professional (SU22) - high environmental release
ESVOC SPERC 9.12b.v1	Use as a fuel: Professional (SU22)
ESVOC SPERC 9.12c.v1	<tx:_11133171108>: <tx:_CONSUMER> (SU21)
ESVOC SPERC 9.6b.v1	Lubricants: Professional (SU22) - low environmental release
ESVOC SPERC 9.6d.v1	Lubricants: Consumer (SU21) - low environmental release



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PC1	Adhesives, sealants
PC10	Building and construction mixtures not covered elsewhere
PC12	Fertilizers
PC13	Fuels
PC15	Non-metal-surface treatment products
PC18	Ink and Toners
PC22	Lawn and Garden Mixtures, including fertilizers
PC23	Leather tanning, dye, finishing, impregnation and care products
PC24	Lubricants, Greases and Release Products
PC27	Plant Protection products
PC3	Air care products
PC31	Polishes and Wax Blends
PC34	Textile dyes, finishing and impregnating products; including bleaches and other processing aids
PC35	Washing and cleaning products (including solvent based products)
PC38	Welding and soldering products, flux products
PC4	Anti-Freeze and De-icing products
PC5	Artists Supply and Hobby mixtures
PC6	Automotive care products
PC8	Biocidal products (e.g. Disinfectants, pest control)
PC9a	Coatings and paints, thinners, paint removers
PC9b	Fillers, putties, plasters, modelling clay
PC9c	Finger paints
PROC1	Use in closed process, no likelihood of exposure
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelletisation
PROC15	Use as laboratory reagent
PROC16	Using material as fuel sources, limited exposure to unburned product to be expected
PROC17	Lubrication at high energy conditions and in partly open process
PROC18	Greasing at high energy conditions
PROC19	Hand-mixing with intimate contact and only PPE available
PROC2	Use in closed, continuous process with occasional controlled exposure
PROC20	Heat and pressure transfer fluids in dispersive use but closed systems
PROC3	Use in closed batch process (synthesis or formulation)
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC6	Calendering operations
PROC7	Industrial spraying
PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU21	Consumer uses: Private households (= general public = consumers)
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites
SU8	Manufacture of bulk, large scale chemicals (including petroleum products)
SU9	Manufacture of fine chemicals

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Commission Regulation 1907/2006/EC (REACH) Annex II.

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