



SAFETY DATA SHEET

JET A-1

This Safety Data Sheet is in accordance with Regulation (EC) No 1907/2006 (REACH).
Commission Regulation (EU) 2020/878 of 18 June 2020.

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

1.1. Product identifier

Product name JET A-1
Chemical Name Kerosine (petroleum)
CAS No 8008-20-6
EC No 232-366-4

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

Identified uses It used as fuel for passenger aircraft turbine.

1.3. Details of the supplier of the safety data sheet

Supplier Akpet Gaz A.Ş.
Akattlar Mahallesi, Ebululla Mardin Caddesi
No: 22 Maya Park Tower I, 34335
Beşiktaş / İstanbul / Turkey
Tel: +90 212 376 66 00
www.lukoil.com.tr
e-mail: info@lukoil.com.tr

Contact Person HSE Manager

1.4. Emergency telephone number

LUKOIL: +90 444 45 85 (7/24)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC No. 1272/2008 and SI 2019 No. 720)

Physical and Chemical Hazards Flam. Liq. 3 - H226
Human health Hazards Skin Irrit. 2 - H315; Asp. Tox. 1 - H304; STOT SE 3 - H336
Environment Hazards Aquatic Chronic 2 - H411

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

CAS No: 8008-20-6



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.



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Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P243	Take precautionary measures against static discharge.
P273	Avoid release to the environment.
P260	Do not breathe vapours.
P280	Wear protective gloves.
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P370+378	In case of fire: Use foam, carbon dioxide or dry powder for extinction.
P501	Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.
May cause irritation the eyes temporarily.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Name	EC No.	CAS No.	Content	Classification (EC 1272/2008)
Kerosine (petroleum); Straight run kerosine	232-366-4	8008-20-6	%100	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Asp. Tox. 1 - H304 STOT SE 3 - H336 Aquatic Chronic 2 - H411

The Full Text for all hazard statements are displayed in section 16.

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.

Inhalation

Move into fresh air and keep at rest. Rinse nose and mouth with water. If necessary, should be applied artificial respiration and heart massage. If there should be given oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth. Keep person under observation. Do not induce vomiting.
If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

Skin contact

Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water.
Promptly remove clothing if soaked through and flush skin with water.
Large quantities: Remove contaminated clothing. Flush skin thoroughly with water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing.



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

Inhalation : Upper respiratory irritation, cough.
Ingestion : Nausea, vomiting, diarrhea.
Skin contact : May cause redness and irritation.
Eye contact : Eye irritation, redness, lacrimation.

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

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Carbon dioxide (CO₂). Dry chemicals, sand, earth, water mist.

Unsuitable extinguishing media DO NOT use water jet.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Vapours may form explosive mixtures with air.

Vapor is heavier than air so that it can leaking to sewer system and may reach to further ignition sources.

Specific hazards

In case of fire, may occur toxic vapors / gases.

The fire produce follow: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Dike and collect extinguishing water.

Keep away all non-emergency personnel from fire area.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Fires in enclosed places should be extinguished by trained personnel wearing protective clothing and an oxygen mask.

Protective equipment for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

Do not smoke, use open fire or other sources of ignition. Provide adequate ventilation.

In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Avoid discharge to the aquatic environment.

Vapor is heavier than air so that it can leaking to sewer system and may reach to further ignition sources.

Inform the relevant authorities in case of seepage large quantity into water resources.

6.3. Methods and material for containment and cleaning up

Keep all ignition sources away from spilled material. Absorb in vermiculite, dry sand or earth and place into containers.

Spilled liquid will evaporate completely in enclosed area so that adequate ventilation must be done and should be entered with protective clothing after measurement.

Large spills should be extinguished by using foam and must remain in foam cover until danger is over.

Recollecting the spilled product should be done by qualified personnel.

Barrier should be used to prevent the spread when poured into water and product should be recollected on the water surface.



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6.4. Reference to other sections

For personal protection, see section 8.
See section 11 for additional information on health hazards.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Use appropriate goggles and gloves. Keep away from heat, sparks and open flame. During application and drying, solvent vapours will be emitted. Do not eat, drink or smoke when using the product. Container must be kept tightly closed. It should not be drawn into mouth.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Protect against physical damage and/or friction. It should be stored in tanks designing according to the product. If the product contacts with hot surfaces there are ignition or explosion hazards. Storage tanks should be labeled and should be kept closed when out of use. Do not remove the warning signs since some products may be present in empty tanks. Despite the possibility of the empty tanks containing product vapor should not be done cutting, welding, soldering processes. If the concentration of hydrocarbon vapor is more than 1%, oxygen concentration is less than 20% in the tank should not be entered without oxygen mask. There is possibility of ignition vapour of product are collected in the storage tanks. Therefore, static electricity must be discharged. Measures should be taken against the igniton source while filling and discharge. Equipments such as pumps etc. must be earthed or transmission cables must be connected each other by a cable to avoid accumulation of static electricity.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
Kerosine (Petroleum); Straight run kerosine	OEL	500 mg/m ³	1000 mg/m ³	

OEL = Occupational Exposure Limit.

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash, quick drench.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.



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Respiratory equipment

Appropriate respiratory equipment should be used when the possibility of exposure to hydrocarbon vapor. Masks in accordance with EN138, EN141.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Gloves in accordance with EN374. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved safety goggles. Goggles in accordance with EN166.

Hygiene measures

Promptly remove non-impervious clothing that becomes contaminated. When using do not eat, drink or smoke. Wash hands after contact. Wash promptly if skin becomes contaminated.

Skin protection

Protective clothing should be worn. Anti-static and flame-retardant protective clothing is recommended to wear.

Environmental Exposure Controls

Please act in accordance with local and national laws.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Identifier	Unit	Value	Test method
Appearance		Liquid	
Colour		Colorless	
Odour		Smell of kerosene	
Odour threshold		No information available.	
pH value		No information available.	
Melting point		No information available.	
Initial boiling point and range		No information available.	
Evaporation rate		No information available.	
Upper/lower flammability or explosive limits		No information available.	
Density, 15 °C	kg/m ³	775-840	ASTM D 1298 or D 4052
Flash Point	°C	Min.38	ASTM D 3828 or D 56
Freezing point	°C	Min.-47	ASTM D 2386 or D 5972
Sulfur	% volume	Max.0,3	ASTM D 1266
Aromatics	% volume	Max.25	ASTM D 1319
Auto-ignition temperature		No information available.	
Vapor pressure		No information available.	
Vapor density		No information available.	
Relative density		No information available.	
Specific gravity		No information available.	
Solubility		No information available.	
Coefficient of dispersion: n-octanol/water		No information available.	



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Decomposition temperature	No information available.
Viscosity	No information available.
Oxidizing properties	No information available.
Explosive properties	No information available.
Particle characteristics	Not applicable.

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.
Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Will not polymerise.

10.4. Conditions to avoid

Should be kept away from sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Avoid contact with strong reducing agent (oxidizing).

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute Toxicity

Based on available data the classification criteria are not met.

Kerosin

LD50, oral, rat	5000 mg/kg
LC50, inhalation, rat	5280 mg/m ³
LD50, dermal, rabbit	2000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage / irritation

Based on available data the classification criteria are not met.
May cause irritation.

Skin and respiratory sensitivity

Based on available data the classification criteria are not met.



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Germ cell mutagenicity:

Genotoxicity - In Vitro/ In Vivo

Based on available data the classification criteria are not met.

Carcinogenicity:

Based on available data the classification criteria are not met.

Reproductive Toxicity – Fertility/ Development

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure:

Based on available data the classification criteria are not met.

Aspiration hazard

May be fatal if swallowed and enters airways.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

It is harmful if swallowed in small doses. If swallowed a greater amount causes nausea and diarrhea. If exceed to lungs damages during vomiting.

Skin contact

Irritant. May cause skin dryness or cracking.

Eye contact

May cause temporary eye irritation. Visual disturbances including blurred vision.

In case of accidentally eye contact causes temporary blindness.

11.2 Information on other hazards

This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

Spillages prevent the transfer of oxygen by forming a film layer on the water surface.

12.2. Persistence and degradability

This product is soluble in the soil without harming the environment.

12.3. Bioaccumulative potential

There is no evidence that accumulating in the soil.

12.4. Mobility in soil

Mobility: The product may spread in water systems. Spilled product causes pollution of underground waters.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.



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12.6. Endocrine disrupting properties

The product does not contain any endocrine disrupting substance.

12.7. Other adverse effects

Should not be released to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Disposed of as hazardous waste. Waste must be treated as the product itself.

13.1. Waste treatment methods

Empty containers, dispose of waste and residues in accordance with local authority requirements.

Environmental manager must be informed of all major spillages.

Make sure containers are empty before discarding. Empty containers must not be burned because of explosion hazard.

Please recycle empty pack. Do not re-use empty containers.

Some products may remain in empty containers. Do not perform heat treatment without erased or removed danger signs or labels from empty containers.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number

UN No. (ADR/RID/ADN)	1863
UN No. (IMDG)	1863
UN No. (ICAO)	1863

14.2. UN proper shipping name

Proper Shipping Name FUEL, AVIATION, TURBINE ENGINE

14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III



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14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS	F-E, S-E
ADR transport category	3
Emergency Action Code	3Y
Hazard No. (ADR)	30
Tunnel Restriction Code	(D/E)
Limited quantities	5 L

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

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

- Commission Regulation (EU) 2020/878 of 18 June 2020.
- Health and Safety at Work etc. Act 1974 (as amended).
- EH40/2005 Workplace exposure limits.
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Seveso Directive

P5c	Low Tier: 5000 tonnes	Upper Tier: 50000 tonnes
E2	Low Tier: 200 tonnes	Upper Tier: 500 tonnes

Restrictions (Annex XVII Regulation 1907/2006)

No specific restrictions on use are known for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations used in safety data sheet

ADR: European Agreement on International Carriage of Dangerous Goods by Road.
ADN: European Agreement on the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement on International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO-TI: Technical Specification for Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
TWA: Time weighted average



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ATE: Estimated value of acute toxicity
EC No: European Community number
CAS: Chemical Theory Service.
LD50: Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
LC50: Substance concentration causing 50% (half) death in the test animals group.
EC50: Effective Concentration of the substance causing the maximum of 50%.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent, Very Bioaccumulative.
SEA: Classification, labeling, packaging regulation
DNEL: Derivative Inactive Level
PNEC: Estimated Unaffected Concentration
BHOT: Specific Target Organ Toxicity

Information Sources

This SDS is written based on the information received from rawmaterial supplier.
European Chemicals Agency (ECHA)

Revision Comments

Revised under current regulations. Chapter 2, 3, 8, 11, 15, 16 have been updated.

Hazard Statements In Full

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.

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Issued Note

This SDS is prepared based on the information and documents received from product owner. CRAD or/and SDS author shall not be responsible for incorrect prepared of SDS and pecuniary loss or intangible damages because of deficient or wrong information and documents which comes from product owner.

Disclaimer

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