SAFETY DATA SHEET

Aviation Fuel Jet A-1 (NATO Code F-35)

Section 1. Identification

Product name : Aviation Fuel Jet A-1 (NATO Code F-35)

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

Material uses : Aviation turbine fuel

Identified uses
Formulation and (re)packing of substances and mixtures; Industrial Use as a fuel; Industrial Use as a fuel; Professional

Uses advised against	Reason
Use in coatings; Professional	-
Use in cleaning agents; Professional	-
Lubricants; Professional (Low environmental release)	-
Lubricants; Professional (High environmental release)	-
Metal working fluids/Rolling oils; Professional	-
Use as binders and release agents; Professional	-
Use in agrochemicals; Professional	-
Road and construction applications; Professional	-
Explosives manufacture & use; Professional	-
Use in coatings; Consumer	-
Use in cleaning agents; Consumer	-
Lubricants; Consumer (Low environmental release)	-
Lubricants; Consumer (High environmental release)	-
Use in agrochemicals; Consumer	-

Supplier : Kuwait Petroleum Aviation (Australia) Pty Limited
Grant Thornton
Level 17, 383 Kent Street Sydney NSW 2000
T +61 2 82491828
M +61 4 6899 1981

Manufacturer / Distributor : Kuwait Petroleum International
Aviation Company (UK) LTD
Duke's Court, Duke Street
GU21 5GH Woking, Surrey
United Kingdom
Tel. +44 (0) 01483 757747

e-mail address of person responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

Emergency telephone number

Australia : 18000 74234 (Toll free)

Australia : +61 2801 44558

Global (English only) : +44 (0) 1865 407 333

CARECHEM24

Section 2. Hazard(s) identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS	Category 3	H226
CARCINOGENICITY	Category 1	H350
ASPIRATION HAZARD	Category 1	H304
AQUATIC HAZARD (LONG-TERM)	Category 2	H411

Section 2. Hazard(s) identification

Ingredients of unknown toxicity : None.

Ingredients of unknown ecotoxicity : None.

GHS label elements

Hazard pictograms :

Signal word : **DANGER**

Hazard statements :
H226 - Flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H350 - May cause cancer.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention :
P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.

Response :
P391 - Collect spillage.
P308 + P313 - IF exposed or concerned: Get medical advice or attention.
P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients :
Kerosine (petroleum), sweetened
Kerosine (petroleum), hydrodesulfurized
Kerosine (petroleum)
Hydrocarbons, C11-C16, n-alkanes, isoalkanes, < 2% aromatics
Renewable hydrocarbons (kerosene type fraction)
Contains:
cumene (Constituent)

Supplemental label elements : Repeated exposure may cause skin dryness or cracking.

Other hazards which do not result in classification : Hazardous concentrations of hydrogen sulphide (H2S) gas may accumulate in the vapour space of storage vessels. Standard procedures for opening or entering tanks, vessels or other containers must strictly be followed to avoid inhalation of this acutely toxic gas.

Section 3. Composition and ingredient information

Substance/mixture : Mixture

Ingredient name	% (w/w)	Identifiers
Kerosine (petroleum), sweetened	≤100	CAS: 91770-15-9 EC: 294-799-5
Kerosine (petroleum), hydrodesulfurized	≤100	CAS: 64742-81-0 EC: 265-184-9
Kerosine (petroleum)	≤100	CAS: 8008-20-6 EC: 232-366-4

Section 3. Composition and ingredient information

Hydrocarbons, C11-C16, n-alkanes, isoalkanes, < 2% aromatics	≤50	EC: 942-085-5
Renewable hydrocarbons (kerosene type fraction)	≤50	EC: 931-082-4
Contains: cumene (Constituent)	<1	CAS: 98-82-8 EC: 202-704-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If exposure to hydrogen sulphide is suspected or cannot be excluded, obtain medical attention IMMEDIATELY. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
Hydrogen sulphide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem code : 3Y

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Hazardous concentrations of hydrogen sulphide (H2S) gas may accumulate in the vapour space of storage vessels. Standard procedures for opening or entering tanks, vessels or other containers must strictly be followed to avoid inhalation of this acutely toxic gas.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Kerosine (petroleum), hydrodesulfurized	**ACGIH TLV (United States, 1/2024)** **[Kerosene]** A3. Absorbed through skin. TWA 8 hours: 200 mg/m³ (as total hydrocarbon vapor).
Kerosine (petroleum)	**ACGIH TLV (United States, 1/2024)** **[Kerosene]** A3. Absorbed through skin. TWA 8 hours: 200 mg/m³ (as total hydrocarbon vapor).

Section 8. Exposure controls and personal protection

Contains: cumene (Constituent)	**Safe Work Australia (Australia, 1/2024)** Absorbed through skin. TWA 8 hours: 125 mg/m³. TWA 8 hours: 25 ppm. STEL 15 minutes: 75 ppm. STEL 15 minutes: 375 mg/m³.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Product may release hydrogen sulphide: a specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water and unintentional releases should be made to help determine controls appropriate to local circumstances.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Do not ingest. If swallowed then seek immediate medical assistance.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2. Gas and combination filter cartridges should comply with the European standard EN14387.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Appearance : Clear

Color : Colorless to light yellow

Odor : Characteristic

Odor threshold : Not applicable.

pH : Not applicable.

Melting point/freezing point : <-45°C (<-49°F) [ASTM D 97]

Boiling point or initial boiling point and boiling range : 150 to 300°C (302 to 572°F) [ASTM D 86]

Flash point : Closed cup: >38°C (>100.4°F) [ISO 2719]

Evaporation rate : Not available.

Flammability : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.

Lower and upper explosion limit/flammability limit : Lower: 0.6%
Upper: 6%

Vapor pressure : <0.5 kPa (<3.76 mm Hg)

Relative vapor density : Not available.

Density : 0.775 to 0.84 g/cm³ [15°C (59°F)] [ASTM D 4052]

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Partition coefficient: n-octanol/water : >2

Auto-ignition temperature : >220°C (>428°F)

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not applicable.
Kinematic (40°C (104°F)): 1 to 2.5 mm^2/s (1 to 2.5 cSt) [ASTM D 445]

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Decomposition products may include the following materials: sulfur oxides
Hydrogen sulphide

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Kerosine (petroleum), hydrodesulfurized	**Rat - Oral - LD50** >5000 mg/kg
Kerosine (petroleum)	**Rat - Oral - LD50** 15 g/kg Toxic effects: Skin After topical exposure - Corrosive
Contains: cumene (Constituent)	**Rat - Oral - LD50** 1400 mg/kg Toxic effects: Gastrointestinal - Gastritis **Rat - Inhalation - LC50 Vapor** 39000 mg/m³ [4 hours]

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**Rabbit - Skin - Edema** Acute Dermal Irritation/Corrosion Duration of treatment/exposure: 4 hours Observation period: 7 days Irritation score: 0 Fully reversible
Kerosine (petroleum), hydrodesulfurized	**Rabbit - Skin - Edema** Acute Dermal Irritation/Corrosion Duration of treatment/exposure: 4 hours Observation period: 7 days Irritation score: 0 Fully reversible **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
Kerosine (petroleum)	**Rabbit - Skin - Edema** Acute Dermal Irritation/Corrosion Duration of treatment/exposure: 4 hours Observation period: 7 days Irritation score: 0 Fully reversible **Rabbit - Skin - Moderate irritant** Amount/concentration applied: 0.5 Ml **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 % **Rabbit - Skin - Severe irritant** Amount/concentration applied: 500 mg
Contains: cumene (Constituent)	**Rabbit - Skin - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 10 mg **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Irritating to skin.

Ingredient name	Conclusion/Summary

Section 11. Toxicological information

Kerosine (petroleum), sweetened	Non-irritant to skin.
Kerosine (petroleum), hydrodesulfurized	Non-irritant to skin.
Kerosine (petroleum)	Non-irritant to skin.

Serious eye damage/eye irritation

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**Rabbit - Eyes - Edema of the conjunctivae** EPA OTS 798.4500 Duration of treatment/exposure: 72 hours Irritation score: 0 Fully reversible
Kerosine (petroleum), hydrodesulfurized	**Rabbit - Eyes - Edema of the conjunctivae** EPA OTS 798.4500 Duration of treatment/exposure: 72 hours Irritation score: 0 Fully reversible
Kerosine (petroleum)	**Rabbit - Eyes - Edema of the conjunctivae** EPA OTS 798.4500 Duration of treatment/exposure: 72 hours Irritation score: 0 Fully reversible
Contains: cumene (Constituent)	**Rabbit - Eyes - Mild irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg **Rabbit - Eyes - Mild irritant** Amount/concentration applied: 86 mg

Conclusion/Summary [Product] : Non-irritating to the eyes.

Ingredient name	Conclusion/Summary
Kerosine (petroleum), sweetened	Non-irritating to the eyes.
Kerosine (petroleum), hydrodesulfurized	Non-irritating to the eyes.
Kerosine (petroleum)	Non-irritating to the eyes.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**Guinea pig - skin** EPA OTS 798.4100 Result: Not sensitizing
Kerosine (petroleum), hydrodesulfurized	**Guinea pig - skin** EPA OTS 798.4100 Result: Not sensitizing
Kerosine (petroleum)	**Guinea pig - skin** EPA OTS 798.4100 Result: Not sensitizing

Skin

Conclusion/Summary [Product] : Not sensitizing

Ingredient name	Conclusion/Summary

Section 11. Toxicological information

Kerosine (petroleum), sweetened	Not sensitizing
Kerosine (petroleum), hydrodesulfurized	Not sensitizing
Kerosine (petroleum)	Not sensitizing

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**In vitro - Bacteria** Result: Negative **In vivo - Mammalian-Animal - Intraperitoneal** Result: Negative
Kerosine (petroleum), hydrodesulfurized	**In vitro - Bacteria** Result: Negative **In vivo - Mammalian-Animal - Intraperitoneal** Result: Negative
Kerosine (petroleum)	**In vitro - Bacteria** Result: Negative **In vivo - Mammalian-Animal - Intraperitoneal** Result: Negative

Conclusion/Summary [Product] : No mutagenic effect.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Carcinogenic.

Reproductive toxicity

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**Rat - Male, Female - Dermal** Reproduction/Developmental Toxicity Screening Test Reproduction/Developmental Toxicity Screening Test 494 mg/kg [7 days per week] [14 days] Maternal toxicity: Negative Developmental: Negative
Kerosine (petroleum), hydrodesulfurized	**Rat - Male, Female - Dermal** Reproduction/Developmental Toxicity Screening Test Reproduction/Developmental Toxicity Screening Test 494 mg/kg [7 days per week] [14 days] Maternal toxicity: Negative Developmental: Negative
Kerosine (petroleum)	**Rat - Male, Female - Dermal** Reproduction/Developmental Toxicity Screening Test Reproduction/Developmental Toxicity Screening Test 494 mg/kg [7 days per week] [14 days] Maternal toxicity: Negative Developmental: Negative

Conclusion/Summary [Product] : Not considered to be toxic to the reproductive system.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result

Section 11. Toxicological information

Contains: cumene (Constituent)	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/ingredient name	Result
Kerosine (petroleum), sweetened	ASPIRATION HAZARD - Category 1
Kerosine (petroleum), hydrodesulfurized	ASPIRATION HAZARD - Category 1
Kerosine (petroleum)	ASPIRATION HAZARD - Category 1
Hydrocarbons, C11-C16, n-alkanes, isoalkanes, < 2% aromatics	ASPIRATION HAZARD - Category 1
Renewable hydrocarbons (kerosene type fraction)	ASPIRATION HAZARD - Category 1
Contains: cumene (Constituent)	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result

Section 11. Toxicological information

Kerosine (petroleum), sweetened

Sub-chronic - Rat - Female - Oral - NOAEL
750 mg/kg [7 days per week] [21 weeks]
Sub-acute - Rat - Male, Female - Dermal - NOAEL
Repeated Dose Dermal Toxicity: 21/28-day Study
≥0.5 mg/kg [5 days per week] [28 days]
Sub-acute - Rat - Male, Female - Inhalation - NOAEL Vapor
Repeated Dose Inhalation Toxicity: 28-day or 14-day Study
≥24 mg/m³ [5 days per week] [28 days]

Kerosine (petroleum), hydrodesulfurized

Sub-chronic - Rat - Female - Oral - NOAEL
750 mg/kg [7 days per week] [21 weeks]
Sub-acute - Rat - Male, Female - Dermal - NOAEL
Repeated Dose Dermal Toxicity: 21/28-day Study
≥0.5 mg/kg [5 days per week] [28 days]
Sub-acute - Rat - Male, Female - Inhalation - NOAEL Vapor
Repeated Dose Inhalation Toxicity: 28-day or 14-day Study
≥24 mg/m³ [5 days per week] [28 days]

Kerosine (petroleum)

Sub-chronic - Rat - Female - Oral - NOAEL
750 mg/kg [7 days per week] [21 weeks]
Sub-acute - Rat - Male, Female - Dermal - NOAEL
Repeated Dose Dermal Toxicity: 21/28-day Study
≥0.5 mg/kg [5 days per week] [28 days]
Sub-acute - Rat - Male, Female - Inhalation - NOAEL Vapor
Repeated Dose Inhalation Toxicity: 28-day or 14-day Study
≥24 mg/m³ [5 days per week] [28 days]

Conclusion/Summary [Product] : Based on available data, the classification criteria are not met.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Kerosine (petroleum) Contains: cumene (Constituent)	15000 1400	N/A N/A	N/A N/A	N/A 39	N/A N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Kerosine (petroleum), sweetened	**Acute - LC50 - Fresh water** Fish, Acute Toxicity Test Fish 2 to 5 mg/l [96 hours] **Acute - EC50 - Fresh water** Daphnia sp. Acute Immobilization Test and Reproduction Test Daphnia 1.4 mg/l [48 hours]

Section 12. Ecological information

	Effect: Mobility **Acute - EC50 - Fresh water** Alga, Growth Inhibition Test Algae 1 to 3 mg/l [72 hours] Effect: (growth rate)
Kerosine (petroleum), hydrodesulfurized	**Acute - LC50 - Fresh water** Fish, Acute Toxicity Test Fish 2 to 5 mg/l [96 hours] **Acute - EC50 - Fresh water** Daphnia sp. Acute Immobilization Test and Reproduction Test Daphnia 1.4 mg/l [48 hours] Effect: Mobility **Acute - EC50 - Fresh water** Alga, Growth Inhibition Test Algae 1 to 3 mg/l [72 hours] Effect: (growth rate)
Kerosine (petroleum)	**Acute - LC50 - Fresh water** Fish, Acute Toxicity Test Fish 2 to 5 mg/l [96 hours] **Acute - EC50 - Fresh water** Daphnia sp. Acute Immobilization Test and Reproduction Test Daphnia 1.4 mg/l [48 hours] Effect: Mobility **Acute - EC50 - Fresh water** Alga, Growth Inhibition Test Algae 1 to 3 mg/l [72 hours] Effect: (growth rate)
Contains: cumene (Constituent)	**Acute - LC50 - Fresh water** Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss* 2700 µg/l [96 hours] Effect: Mortality **Acute - EC50 - Marine water** Crustaceans - Brine shrimp - *Artemia sp.* - Nauplii Age: 2 to 3 7.4 mg/l [48 hours] Effect: Intoxication **Acute - EC50 - Fresh water** Algae - Green algae - *Raphidocelis subcapitata* 2600 µg/l [72 hours] Effect: Growth

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Product/ingredient name	Result
Kerosine (petroleum), sweetened	Ready Biodegradability - Manometric Respirometry Test 58.6% [28 days] - Inherent
Kerosine (petroleum), hydrodesulfurized	Ready Biodegradability - Manometric Respirometry Test 58.6% [28 days] - Inherent
Kerosine (petroleum)	Ready Biodegradability - Manometric Respirometry Test 58.6% [28 days] - Inherent

Section 12. Ecological information

Conclusion/Summary [Product] : This product is inherently biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Aviation Fuel Jet A-1 (NATO Code F-35)	-	-	Inherent
Kerosine (petroleum), sweetened	-	-	Inherent
Kerosine (petroleum), hydrodesulfurized	-	-	Inherent
Kerosine (petroleum)	-	-	Inherent

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Aviation Fuel Jet A-1 (NATO Code F-35)	>2	-	Low
Kerosine (petroleum), sweetened	3 to 6	-	High
Kerosine (petroleum), hydrodesulfurized	3 to 6	-	High
Kerosine (petroleum)	3 to 6	-	High
Contains: cumene (Constituent)	3.55	35.48	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Section 14. Transport information

	ADG	ADR/RID	IMDG	IATA
UN number	UN1863	UN1863	UN1863	UN1863
UN proper shipping name	FUEL, AVIATION, TURBINE ENGINE	FUEL, AVIATION, TURBINE ENGINE	FUEL, AVIATION, TURBINE ENGINE	Fuel, aviation, turbine engine
Transport hazard class(es)	3 	3 	3 	3 
Packing group	III	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADG : **Hazchem code** 3Y
Special provisions 223

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Hazard identification number 30
Limited quantity 5 L
Special provisions 664
Tunnel code (D/E)

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-E, S-E
Special provisions 223

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.
Special provisions A3

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Section 15. Regulatory information

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	:	Not determined.
Canada	:	Not determined.
China	:	Not determined.
Eurasian Economic Union	:	**Russian Federation inventory**: All components are listed or exempted.
Japan	:	**Japan inventory (CSCL)**: Not determined. **Japan inventory (ISHL)**: Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States of America	:	Not determined.
Viet Nam	:	Not determined.

Section 16. Any other relevant information

Training advice : Ensure operatives are trained to minimise exposures.

History

Date of printing	:	14-07-2025
Date of issue/Date of revision	:	14-07-2025
Date of previous issue	:	27-02-2025
Version	:	2.02
Prepared by	:	Kuwait Petroleum Research & Technology B.V., The Netherlands
Key to abbreviations	:	ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ASTM = American Society for Testing and Materials ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service DIN = German Institute for Standardization DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EC50 = Half maximal effective concentration EN = European Standard (Norm) GHS - Globally Harmonized System of Classification and Labeling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IC50 = Half maximal inhibitory concentration IMDG = International Maritime Dangerous Goods IMO = International Maritime Organisation ISO = International Organization for Standardization LC50 = Median lethal concentration LD50 = Median lethal dose

Section 16. Any other relevant information

LOAEL / LOAEC = Lowest Observed Adverse Effect Level / Concentration
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
NOAEL / NOAEC = No Observed Adverse Effect Level / Concentration
NOEL / NOEC = No Observed Effect Level / Concentration
OECD = Organisation for Economic Co-operation and Development
OEL = Occupational Exposure Limit
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS = Safety Data Sheet
STEL = Short Term Exposure Limit
SUSMP = Standard Uniform Schedule of Medicine and Poisons
TLV = Threshold Limit Value
TWA = Time Weighted Average
UN = United Nations
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
CARCINOGENICITY - Category 1	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.