

# SAFETY DATA SHEET

## Aviation Fuel Jet A-1



### Section 1. Identification

**Product name** : Aviation Fuel Jet A-1  
**Viscosity or Type** : Aviation Fuel Jet F35

#### 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 in fuel; Industrial
Use in 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 in binder and release agents; Professional	-
Use in agrochemicals; Professional	-
Use in road and construction products; Professional	-
Use in explosives; Professional	-
Use in coatings; Consumer	-
Use in cleaning agents; Consumer	-
Lubricants; Consumer (Low environmental release)	-
Lubricants; Consumer (High environmental release)	-
Use in agrochemicals; Consumer	-

**Manufacturer / Distributor** : Kuwait Petroleum Aviation (Australia) Pty Limited  
Level 17 383 Kent Street Sydney NSW 2000  
T +61 2 82491828  
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**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



### 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

**Ingredients of unknown toxicity** : None.

**Ingredients of unknown ecotoxicity** : None.

#### GHS label elements

## Section 2. Hazard(s) identification

### 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 (H<sub>2</sub>S) 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)	CAS number
Kerosine (petroleum), sweetened	≤100	91770-15-9
Kerosine (petroleum), hydrodesulfurized	≤100	64742-81-0
Kerosine (petroleum)	≤100	8008-20-6
Hydrocarbons, C11-C16, n-alkanes, isoalkanes, < 2% aromatics	≤50	-
Renewable hydrocarbons (kerosene type fraction)	≤50	-
Contains: cumene (Constituent)	<1	98-82-8

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.

## Section 3. Composition and ingredient information

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

- 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.

## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, 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

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- 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. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 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 (H<sub>2</sub>S) 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. Provide adequate ventilation. 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	<b>ACGIH TLV (United States, 1/2023).</b> <b>[Kerosene as total hydrocarbon vapor]</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Kerosine (petroleum)	<b>ACGIH TLV (United States, 1/2023).</b> <b>[Kerosene as total hydrocarbon vapor]</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Contains:	<b>Safe Work Australia (Australia, 10/2022).</b>

## Section 8. Exposure controls and personal protection

cumene (Constituent)

**Absorbed through skin.**TWA: 125 mg/m<sup>3</sup> 8 hours.

TWA: 25 ppm 8 hours.

STEL: 75 ppm 15 minutes.

STEL: 375 mg/m<sup>3</sup> 15 minutes.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.

## Section 9. Physical and chemical properties

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

### Appearance

<b>Physical state</b>	: Liquid.
<b>Appearance</b>	: Clear.
<b>Color</b>	: Colorless to light yellow.
<b>Odor</b>	: Characteristic.
<b>Odor threshold</b>	: Not applicable.
<b>pH</b>	: Not applicable.
<b>Melting point/freezing point</b>	: <-45°C (<-49°F) [ASTM D 97]
<b>Boiling point, initial boiling point, and boiling range</b>	: 150 to 300°C (302 to 572°F) [ASTM D 86]
<b>Flash point</b>	: Closed cup: >38°C (>100.4°F) [ISO 2719]
<b>Flammability</b>	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
<b>Lower and upper explosion limit/flammability limit</b>	: Lower: 0.6% Upper: 6%
<b>Vapor pressure</b>	: <0.5 kPa (<3.76 mm Hg)
<b>Relative vapor density</b>	: Not available.
<b>Density</b>	: 0.775 to 0.84 g/cm <sup>3</sup> [15°C (59°F)] [ASTM D 4052]
<b>Solubility(ies)</b>	:

Media	Result
cold water	Not soluble
hot water	Not soluble

<b>Partition coefficient: n-octanol/water</b>	: >2
<b>Auto-ignition temperature</b>	: >220°C (>428°F)
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Dynamic (room temperature): Not applicable. Kinematic (40°C (104°F)): 1 to 2.5 mm <sup>2</sup> /s (1 to 2.5 cSt) [ASTM D 445]
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: 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.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	: 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	Species	Dose	Exposure
Kerosine (petroleum), hydrodesulfurized	LD50 Oral	Rat	>5000 mg/kg	-
Kerosine (petroleum) Contains: cumene (Constituent)	LD50 Oral LC50 Inhalation Vapor	Rat Rat	15 g/kg 39000 mg/m <sup>3</sup>	- 4 hours
	LD50 Oral	Rat	1400 mg/kg	-

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

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kerosine (petroleum), sweetened	Eyes - Edema of the conjunctivae	Rabbit	0	72 hours	-
	Skin - Edema	Rabbit	0	4 hours	7 days
Kerosine (petroleum), hydrodesulfurized	Eyes - Edema of the conjunctivae	Rabbit	0	72 hours	-
	Skin - Edema	Rabbit	0	4 hours	7 days
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Kerosine (petroleum)	Eyes - Edema of the conjunctivae	Rabbit	0	72 hours	-
	Skin - Edema	Rabbit	0	4 hours	7 days
	Skin - Moderate irritant	Rabbit	-	0.5 MI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 %	-
Contains: cumene (Constituent)	Skin - Severe irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	86 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-

#### Conclusion/Summary

**Skin** : Irritating to skin.

**Eyes** : Non-irritating to the eyes.

#### Sensitization

Product/ingredient name	Route of exposure	Species	Result
Kerosine (petroleum), sweetened	skin	Guinea pig	Not sensitizing
Kerosine (petroleum), hydrodesulfurized	skin	Guinea pig	Not sensitizing
Kerosine (petroleum)	skin	Guinea pig	Not sensitizing

#### Conclusion/Summary

**Skin** : Not sensitizing

#### Mutagenicity



## Section 11. Toxicological information

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

**Conclusion/Summary** : No mutagenic effect.

### Carcinogenicity

Not available.

**Conclusion/Summary** : Carcinogenic.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Kerosine (petroleum), sweetened	Negative	-	Negative	Rat - Male, Female	Dermal: 494 mg/ kg	14 days; 7 days per week
Kerosine (petroleum), hydrodesulfurized	Negative	-	Negative	Rat - Male, Female	Dermal: 494 mg/ kg	14 days; 7 days per week
Kerosine (petroleum)	Negative	-	Negative	Rat - Male, Female	Dermal: 494 mg/ kg	14 days; 7 days per week

**Conclusion/Summary** : Not considered to be toxic to the reproductive system.

### Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Kerosine (petroleum), sweetened	Negative - Oral	Rat	1000 mg/kg	10 days; 7 days per week
Kerosine (petroleum), hydrodesulfurized	Negative - Oral	Rat	1000 mg/kg	10 days; 7 days per week
Kerosine (petroleum)	Negative - Oral	Rat	1000 mg/kg	10 days; 7 days per week

**Conclusion/Summary** : No teratogenic effect.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Contains: cumene (Constituent)	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

## Section 11. Toxicological information

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	Species	Dose	Exposure
Kerosine (petroleum), sweetened	Sub-acute NOAEL Dermal	Rat - Male, Female	≥0.5 mg/kg	28 days; 5 days per week
	Sub-chronic NOAEL Oral	Rat - Female	750 mg/kg	21 weeks; 7 days per week
	Sub-acute NOAEL Inhalation Vapor	Rat - Male, Female	≥24 mg/m <sup>3</sup>	28 days; 5 days per week
Kerosine (petroleum), hydrodesulfurized	Sub-acute NOAEL Dermal	Rat - Male, Female	≥0.5 mg/kg	28 days; 5 days per week
	Sub-chronic NOAEL Oral	Rat - Female	750 mg/kg	21 weeks; 7 days per week
	Sub-acute NOAEL Inhalation Vapor	Rat - Male, Female	≥24 mg/m <sup>3</sup>	28 days; 5 days per week
Kerosine (petroleum)	Sub-acute NOAEL Dermal	Rat - Male, Female	≥0.5 mg/kg	28 days; 5 days per week
	Sub-chronic NOAEL Oral	Rat - Female	750 mg/kg	21 weeks; 7 days per week

## Section 11. Toxicological information

	Sub-acute NOAEL Inhalation Vapor	Rat - Male, Female	≥24 mg/m <sup>3</sup>	28 days; 5 days per week
<b>Conclusion/Summary</b>	: Based on available data, the classification criteria are not met.			
<b>General</b>	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.			
<b>Carcinogenicity</b>	: May cause cancer. Risk of cancer depends on duration and level of exposure.			
<b>Mutagenicity</b>	: No known significant effects or critical hazards.			
<b>Reproductive toxicity</b>	: 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	Species	Exposure
Kerosine (petroleum), sweetened	Acute EC50 1 to 3 mg/l Fresh water	Algae	72 hours
	Acute EC50 1.4 mg/l Fresh water	Daphnia	48 hours
Kerosine (petroleum), hydrodesulfurized	Acute LC50 2 to 5 mg/l Fresh water	Fish	96 hours
	Acute EC50 1 to 3 mg/l Fresh water	Algae	72 hours
	Acute EC50 1.4 mg/l Fresh water	Daphnia	48 hours
Kerosine (petroleum)	Acute LC50 2 to 5 mg/l Fresh water	Fish	96 hours
	Acute EC50 1 to 3 mg/l Fresh water	Algae	72 hours
	Acute EC50 1.4 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 2 to 5 mg/l Fresh water	Fish	96 hours
Contains: cumene (Constituent)	Acute EC50 7.4 mg/l Marine water	Crustaceans - <i>Artemia sp.</i> - Nauplii	48 hours
	Acute EC50 10.6 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Kerosine (petroleum), sweetened	301F Ready Biodegradability - Manometric Respirometry Test	58.6 % - Inherent - 28 days	-	-
Kerosine (petroleum), hydrodesulfurized	301F Ready Biodegradability - Manometric Respirometry Test	58.6 % - Inherent - 28 days	-	-
Kerosine (petroleum)	301F Ready Biodegradability - Manometric	58.6 % - Inherent - 28 days	-	-

## Section 12. Ecological information

	Respirometry Test			
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**Conclusion/Summary** : This product is inherently biodegradable.

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

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Aviation Fuel Jet A-1	>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 (K<sub>oc</sub>)** : 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

	ADG	ADR/RID	IMDG	IATA
<b>UN number</b>	UN1863	UN1863	UN1863	UN1863
<b>UN proper shipping name</b>	FUEL, AVIATION, TURBINE ENGINE	FUEL, AVIATION, TURBINE ENGINE	FUEL, AVIATION, TURBINE ENGINE	Fuel, aviation, turbine engine

## Section 14. Transport information

<b>Transport hazard class(es)</b>	3 	3  	3  	3 
<b>Packing group</b>	III	III	III	III
<b>Environmental hazards</b>	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.

#### 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

## Section 15. Regulatory information

Not listed.

### Inventory list

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

## Section 16. Any other relevant information

**Training advice** : Ensure operatives are trained to minimise exposures.

### History

<b>Date of printing</b>	: 06-12-2023
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<b>Prepared by</b>	: 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
- 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

## Section 16. Any other relevant information

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.