

SAFETY DATA SHEET

AVIATION FUEL JET A-1

Infosafe No.: LQBSJ
ISSUED Date : 27/06/2023
ISSUED by: UNITED PETROLEUM PTY LTD

Section 1 - Identification

Product Identifier

AVIATION FUEL JET A-1

Company Name

UNITED PETROLEUM PTY LTD

Address

600 Glenferrie Road Hawthorn
Vic 3122 AUSTRALIA

Telephone/Fax Number

Tel: (03)9413 1400
Fax: (03)9413 1401

Emergency Phone Number

1300 131 001

Recommended use of the chemical and restrictions on use

Aviation turbine fuel

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Flammable liquids: Category 3

Skin corrosion/irritation: Category 2

Aspiration hazard: Category 1

Specific target organ toxicity (single exposure): Category 3 (Narcotic)

Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

Signal Word (s)

DANGER

Hazard Statement (s)

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.

Pictogram (s)

Flame, Exclamation mark, Health hazard, Environment

**Precautionary Statement –Prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement –Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor
 P331 Do NOT induce vomiting.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P370+P378 In case of fire: Use dry chemical, CO2, water spray (fog) or foam. to extinguish.
 P391 Collect spillage.

Precautionary Statement –Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.

Precautionary Statement –Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

Other Information

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 Information on Ingredients

Ingredients

Name	CAS	Proportion
Kerosine (petroleum), hydrodesulfurized	64742-81-0	100 %

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Dry chemical, CO₂, water spray (fog) or foam.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide, oxides of nitrogen, sulfur oxides and hydrogen sulphide.

Specific hazards arising from the chemical

Flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code

3Y

Decomposition Temperature

>220°C

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. Approach the release from upwind. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking and explosion-proof tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Other Information

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7 - Handling and Storage

Precautions for Safe Handling

Avoid contact with skin and eyes. Wear overalls, impervious gloves and safety glasses. Use in designated areas with local exhaust ventilation, away from sparks, flames and other ignition sources. Use only with adequate ventilation. Use approved flammable liquid storage containers in the work area. Prevent release of vapours and mists into workplace air. Keep containers tightly closed. Use only non-sparking tools. Take precautionary measures against static discharges. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

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.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

See Section 10 for incompatible materials before handling or use.

Empty containers retain product residue and can be hazardous. Do not reuse container. Keep in the original container or an approved alternative made from a compatible material.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material, however, the TWA exposure standards for refined mineral oil mist is 5 mg/m³. As with all chemicals, exposure should be kept to the lowest possible levels.

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

Source: Safe Work Australia.

Biological Monitoring

No biological limits allocated.

Control Banding

Not available

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337(series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear impervious gloves such as nitrile rubber (0.17 mm, breakthrough time: < 1 hour). Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards

No further relevant information available.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Clear colourless liquid
Colour	Clear colourless	Odour	Characteristic
Melting Point	<-45°C	Boiling Point	>160°C
Decomposition Temperature	>220°C	Solubility in Water	Insoluble in cold water and hot water. Not dispersible in cold water and hot water.
Specific Gravity	0.75 to 0.86	pH	Not applicable
Vapour Pressure	<0.5 kPa [room temperature]	Relative Vapour Density (Air=1)	Not available
Evaporation Rate	Not available	Odour Threshold	Not available
Viscosity	1 to 2.5 cSt (40°C)	Partition Coefficient: n-octanol/water (log value)	3-6 (LogPow)
Flash Point	Closed cup: >38°C [ASTM D93.]	Flammability	Flammable
Auto-Ignition Temperature	> 220 °C	Flammable Limits - Lower	0.7%
Flammable Limits - Upper	5%	Particle Characteristics	Not available

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of storage and handling.

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 pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible Materials

Oxidizing materials.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: sulfur oxides and hydrogen sulphide.

Hazardous Polymerization

Not available

Section 11 - Toxicological Information

Toxicology Information

The available toxicity data for material given below.

Acute Toxicity - Oral

Kerosine (petroleum), hydrodesulfurized

LD50 (rat): >5000 mg/kg

Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Skin

Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Skin Corrosion/Irritation

Kerosine (petroleum), hydrodesulfurized

Score: 0(rabbit, Oedema)

Exposure: 4 hours

Observation: 7 days

Skin - Moderate irritant (rabbit)

Exposure: 24 hours 500 milligrams

Eye

May be irritating to eyes. The symptoms may include redness, itching and tearing.

Serious Eye Damage/Irritation

Kerosine (petroleum), hydrodesulfurized

Score: 0(rabbit, Oedema of the conjunctivae)

Exposure: 72 hours

Score: 0

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Kerosine (petroleum), hydrodesulfurized

Not sensitizing (Guinea pig)

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Result: Negative

Experiment: In vitro

Subject: Bacteria

Result: Negative

Experiment: In vivo

Subject: Mammalian-Animal

Carcinogenicity

Not considered to be a carcinogenic hazard.

Jet fuel is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

Reproductive Toxicity

Not considered to be toxic to reproduction.

Kerosine (petroleum), hydrodesulfurized

Reproductive toxicity

Maternal toxicity: Negative

Developmental toxin: Negative

Species: Rat - Male, Female

Dose: 494 mg/kg
Exposure: 14 days; 7 days per week

Teratogenicity

Result: negative - Oral

Species: Rat

Dose: 1000 mg/kg

Exposure: 10 days; 7 days per week

STOT - Single Exposure

May cause drowsiness or dizziness.

STOT - Repeated Exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Other Information

Potential chronic health effects

Kerosine (petroleum), hydrodesulfurized

Result: Sub-chronic, NOAEL, Oral

Species: Rat - Female

Dose: 750 mg/kg

Exposure: 21 weeks; 7 days per week

Result: Sub-acute, NOAEL, Dermal

Species: Rat - Male, Female

Dose: ≥ 0.5 mg/kg

Exposure: 28 days; 5 days per week

Result: Sub-acute, NOAEL, Inhalation Vapour

Species: Rat - Male, Female

Dose: ≥ 24 mg/m³

Exposure: 28 days; 5 days per week

Section 12 - Ecological Information

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and degradability

Kerosine (petroleum), hydrodesulfurized

Biodegradability: Inherent

58.6 % - Inherent - 28 days

301F Ready Biodegradability - Manometric Respirometry Test

Mobility

Not available

Bioaccumulative Potential

Kerosine (petroleum), hydrodesulfurized

LogPow: 3-6

Potential: high

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Fish

Kerosine (petroleum), hydrodesulfurized
LC50(Fish, Fresh water): 2 to 5 mg/l

Acute Toxicity - Daphnia

Kerosine (petroleum), hydrodesulfurized
EC50(Daphnia, Fresh water): 1.4 mg/l

Acute Toxicity - Algae

Kerosine (petroleum), hydrodesulfurized
EC50(Algae, Fresh water): 1 to 3 mg/l

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Advise flammable nature. Empty containers may contain flammable residues. Do not cut, puncture or weld on or near containers. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.

To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG Code):

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1: Explosives

- Division 2.1: Flammable Gases.

(Division 2.1 and Class 3 are incompatible in transport if both are in tanks or other receptacles with a capacity individually exceeding 500 L)

- Division 2.3: Toxic Gases

- Division 4.2: Spontaneously Combustible Substances

- Division 5.1: Oxidising substances

- Division 5.2: Organic Peroxides

- Class 6: Toxic or Infectious Substances

(where the flammable liquid is nitromethane)

- Class 7: Radioactive materials unless specifically exempted

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 3

UN No: 1863

Proper Shipping Name: FUEL, AVIATION, TURBINE ENGINE (Kerosine (petroleum), hydrodesulfurized) (MARINE POLLUTANT)

Packing Group: III

EMS: F-E, S-E

Special Provisions: 223

Air Transport (ICAO/IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

Class/Division: 3

UN No: 1863

Proper Shipping Name: Fuel, aviation, turbine engine

Packing Group: III
Packaging Instructions (passenger & cargo): 355
Packaging Instructions (cargo only): 366
Hazard Label: Flammable liquid
Special Provisions: A3

ADG U.N. Number

1863

ADG Proper Shipping Name

FUEL, AVIATION, TURBINE ENGINE

ADG Transport Hazard Class

3

ADG Packing Group

III

Hazchem Code

3Y

IERG Number

14

Special Precautions for User

Not available

IMDG Marine pollutant

Yes

Transport in Bulk

Not available

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia.

SUSMP Schedule: S5. When packed in containers having a capacity of 20 litres or less.

SUSMP Schedule Not scheduled when packed in containers having capacity of greater than 20 litres.

Poisons Schedule

S5

Montreal Protocol

Not listed

Stockholm Convention

Not listed

Rotterdam Convention

Not listed

International Convention for the Prevention of Pollution from Ships (MARPOL)

This product is classified as Oils under MARPOL Annex I. MARPOL Annex I rules apply for bulk shipments by sea.

Agricultural and Veterinary Chemicals Act 1994

Not available

Basel Convention

Not available

Section 16 - Any Other Relevant Information

Date of Preparation

SDS Created: June 2023

Version Number

1.0

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.

Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.