

**Jet A Aviation Fuel**

Version 2.8

Revision Date 2024-09-17

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

Product Name : Jet A Aviation Fuel
Material : 1126286, 1126287, 1102484, 1103429, 1102481, 1103418,
1102485, 1102483, 1102482, 1024254, 1024255, 1024256,
1024257, 1104981, 1104992

Use : Fuel

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:**Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212

Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Greece: (0030) 2107793777 (24 hours/day, 7 days/week)

Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)

Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000

Norway: 22 59 13 00 (24 hours/day, 7 days/week)

Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606

Slovakia: +421 2 5477 4166

Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

Responsible Department : Product Safety and Toxicology Group
 E-mail address : SDS@CPChem.com
 Website : www.CPChem.com

SECTION 2: Hazards identification**Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

: Flammable liquids, Category 3
 Skin irritation, Category 2
 Specific target organ toxicity - single exposure, Category 3,
 Central nervous system
 Aspiration hazard, Category 1

Labeling

Symbol(s)



Signal Word

: Danger

Hazard Statements

: H226: Flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

H336: May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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.

Disposal:

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

Carcinogenicity:

IARC	Group 2B: Possibly carcinogenic to humans
	Naphthalene 91-20-3
	Ethylbenzene 100-41-4
NTP	Reasonably anticipated to be a human carcinogen
	Naphthalene 91-20-3

SECTION 3: Composition/information on ingredients

Synonyms : Aviation Turbine Fuel A
Jet A-1 Fuel
Kerosene
Kerosene Turbine Fuel
Jet A Fuel

Molecular formula : UVCB

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Component	CAS-No.	Weight %
Kerosene C9-C16	8008-20-6	0 - 100
Distillates (petroleum), Hydrotreated light	64742-47-8	0 - 100
Kerosine, petroleum, hydrodesulfurized	64742-81-0	0 - 100
Naphthalene	91-20-3	0 - 3
Ethylbenzene	100-41-4	0 - 1

SECTION 4: First aid measures

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
- If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

- Flash point : 37.8°C (100.0°F)
- Autoignition temperature : 210°C (410°F)
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical.
- Unsuitable extinguishing media : High volume water jet.
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

- Fire and explosion protection : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
- Hazardous decomposition products : Hydrocarbons. Carbon oxides.

SECTION 6: Accidental release measures

- Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
- Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage**Handling**

- Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
- Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

Storage

- Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

- Use : Fuel

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****US**

Components	Basis	Value	Control parameters	Note
Distillates (petroleum), Hydrotreated light	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	(b),
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	ACGIH	TWA	200 mg/m3	A3, Skin,
	OSHA Z-1	TWA	5 mg/m3	Mist
	OSHA Z-1-A	TWA	5 mg/m3	Mist
Kerosene C9-C16	ACGIH	TWA	200 mg/m3	A3, Skin,
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
Kerosine, petroleum, hydrodesulfurized	ACGIH	TWA	200 mg/m3	A3, Skin,
	ACGIH	TWA	10 ppm,	A3, Skin,
Naphthalene	ACGIH	STEL	15 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	
	OSHA Z-1	TWA	100 ppm, 435 mg/m3	
Ethylbenzene	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
	ACGIH	TWA	20 ppm,	A3,

() Adopted values or notations enclosed are those for which changes are proposed in the NIC

(b) The value in mg/m3 is approximate.

A3 Confirmed animal carcinogen with unknown relevance to humans

A4 Not classifiable as a human carcinogen

eye dam Eye damage

eye irr Eye irritation

hematologic eff Hematologic effects

Skin Danger of cutaneous absorption

URT irr Upper Respiratory Tract irritation

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Distillates (petroleum), Hydrotreated light	64742-47-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m ³	2017-09-01
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01

Biological exposure indices**US**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid: 0.15 g/g creatinine Nonspecific (Urine)	End of shift (As soon as possible after exposure ceases)	2016-03-01

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Personal protective equipment

- Respiratory protection : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as: Air-Purifying Respirator for Organic Vapors. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

- Form : liquid
 Physical state : liquid
 Color : Clear light yellow

Safety data

- Flash point : 37.8°C (100.0°F)
 Lower explosion limit : 0.6 %(V)
 Upper explosion limit : 4.7 %(V)
 Oxidizing properties : No
 Autoignition temperature : 210°C (410°F)
 Molecular formula : UVCB

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Molecular weight	: Not applicable
pH	: Not applicable
Pour point	: No data available
Boiling point/boiling range	: 149-300°C (300-572°F)
Vapor pressure	: 0.40 MMHG at 20°C (68°F)
Relative density	: 0.775 at 20 °C (68 °F)
Density	: 806.5 g/l
Water solubility	: negligible
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: 1.5 cSt at 20°C (68°F)
Relative vapor density	: 4.5 (Air = 1.0)
Evaporation rate	: 1
Percent volatile	: > 99 %

SECTION 10: Stability and reactivity

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions	
Hazardous reactions	: Hazardous reactions: Hazardous polymerization does not occur. Hazardous reactions: Vapors may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks.
Materials to avoid	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous decomposition	: Hydrocarbons

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

products Carbon oxides**Other data** : No decomposition if stored and applied as directed.**SECTION 11: Toxicological information**

Jet A Aviation Fuel
Acute oral toxicity : LD50: > 5,000 mg/kg
 Species: Rat

Jet A Aviation Fuel
Acute inhalation toxicity : Acute toxicity estimate: 5.25 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist
 Method: Calculation method

Acute dermal toxicity

Kerosene C9-C16 : LD50: >2000 milligram per kilogram
 Species: Rabbit

Distillates (petroleum),
 Hydrotreated light : LD50: >2 g/kg
 Species: Rabbit
 Method: OECD Test Guideline 402

Ethylbenzene : LD50: 15,415 mg/kg
 Species: Rabbit

Jet A Aviation Fuel
Skin irritation : May cause skin irritation in susceptible persons.

Jet A Aviation Fuel
Eye irritation : Vapors may cause irritation to the eyes, respiratory system
 and the skin.

Jet A Aviation Fuel
Sensitization : No adverse effects expected.

Repeated dose toxicity

Kerosene C9-C16 : Species: Rabbit
 Application Route: Dermal
 Dose: 0, 200, 1000, 2000 mg/kg
 Exposure time: 28 day
 Number of exposures: 3 times/wk
 Lowest observable effect level: 1,000 mg/kg

Distillates (petroleum),
 Hydrotreated light : Species: Rat, male
 Sex: male
 Application Route: inhalation (vapor)
 Dose: 0 , 500, 1000 mg/m3
 Exposure time: 13 wks
 Number of exposures: 24 h/d
 Lowest observable effect level: 500 mg/m3
 Method: OECD Guideline 413

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Target Organs: Kidney

Species: Rat, female

Sex: female

Application Route: inhalation (vapor)

Dose: 0 , 500, 1000 mg/m3

Exposure time: 13 wks

Number of exposures: 24 h/d

NOEL: > 1000 mg/m3

Method: OECD Guideline 413

No adverse effect has been observed in chronic toxicity tests.

Ethylbenzene

Species: Rat, male

Sex: male

Application Route: Inhalation

Dose: 200, 400, 600, 800 ppm

Exposure time: 13 weeks

Number of exposures: 6 hours/day, 6 days/week

NOEL: 200 ppm

Test substance: yes

Target Organs: Ototoxicity

Genotoxicity in vitro

Kerosene C9-C16

: Test Type: Ames test

Result: negative

Test Type: Mouse lymphoma assay

Result: positive

Naphthalene

Test Type: Ames test

Result: negative

Test Type: Sister Chromatid Exchange Assay

Result: negative

Test Type: Unscheduled DNA synthesis assay

Result: negative

Ethylbenzene

Test Type: Ames test

Result: negative

Test Type: Unscheduled DNA synthesis assay

Result: negative

Genotoxicity in vivo

Kerosene C9-C16

: Test Type: Cytogenetic assay

Result: negative

Naphthalene

Test Type: Mouse micronucleus assay

Result: negative

Ethylbenzene

Test Type: Mouse micronucleus assay

Species: Mouse

Result: negative

Carcinogenicity

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Kerosene C9-C16

: Species: Mouse
 Dose: 0, 28.5, 50, 100%
 Exposure time: 104 wks
 Number of exposures: 2, 4, or 7 times/wk

Naphthalene

Species: Mouse
 Sex: male
 Dose: 10, 30 ppm
 Exposure time: 105 weeks
 Number of exposures: 6 hours/day, 5 days/week
 Test substance: yes
 Print Date: No information available.
 Remarks: No evidence of carcinogenicity

Species: Mouse
 Sex: female
 Dose: 10, 30 ppm
 Exposure time: 105 weeks
 Number of exposures: 6 hours/day, 5 days/week
 Test substance: yes
 Print Date: No information available.
 Remarks: increased incidence of alveolar/bronchiolar adenomas

Species: Rat
 Sex: male and female
 Dose: 10, 30, 60 ppm
 Exposure time: 105 weeks
 Number of exposures: 6 hours/day, 5 days/week
 Test substance: yes
 Print Date: No information available.
 Remarks: nose respiratory epithelial adenoma, increased incidence of olfactory neuroblastomas

Developmental Toxicity

Kerosene C9-C16

: Species: Rat
 Application Route: Inhalation
 Dose: 0, 106, 364 ppm
 Exposure time: 6 hrs/d
 Test period: GD 6-15
 NOEL Teratogenicity: 364 ppm
 NOEL Maternal: 364 ppm

Distillates (petroleum),
Hydrotreated light

Species: Rat
 Application Route: Inhalation
 Dose: 0, 106, 364 mg/l
 Exposure time: 6h/d
 Test period: GD 6 - 20
 NOEL Teratogenicity: >= 364 mg/l
 NOEL Maternal: >= 364 mg/l

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

	<p>Species: Rat Application Route: oral gavage Dose: 500, 1000, 1500, 2000 mg/kg/d Exposure time: 10 d Test period: GD 6 - 15 Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 500 mg/kg</p>
Naphthalene	<p>Species: Rabbit Application Route: oral gavage Dose: 40, 200, 400 mg/kg Test period: 29 d, GD 6-18 NOAEL Teratogenicity: 400 mg/kg</p>
Jet A Aviation Fuel Aspiration toxicity	: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
CMR effects	
Naphthalene	: Carcinogenicity: Limited evidence of carcinogenicity in animal studies
Ethylbenzene	<p>Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: In vivo tests did not show mutagenic effects Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction</p>
Jet A Aviation Fuel Further information	: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

Kerosene C9-C16	: LL50: 2 - 5 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 203
Distillates (petroleum), Hydrotreated light	NOEC: 2 mg/l Exposure time: 96 h Species: Salmo gairdneri (Rainbow trout) Method: OECD Test Guideline 203
Naphthalene	LC50: 3.2 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Ethylbenzene LC50: 4.3 mg/l
Exposure time: 96 h
Species: *Marone saxatilis* (striped bass)

Toxicity to daphnia and other aquatic invertebrates

Kerosene C9-C16 : EL50: 1.4 mg/l
Exposure time: 48 h
Species: *Daphnia magna* (Water flea)
Method: OECD Test Guideline 202

Distillates (petroleum),
Hydrotreated light EL50: 1.4 mg/l
Exposure time: 48 h
Species: *Daphnia magna* (Water flea)
static test Method: OECD Test Guideline 202

Naphthalene LC50: 2.16 mg/l
Exposure time: 48 h
Species: *Daphnia magna* (Water flea)

Ethylbenzene LC50: 2.6 mg/l
Exposure time: 96 h
Species: *Mysidopsis bahia* (mysid shrimp)

EC50: 2.2 mg/l
Exposure time: 48 h
Species: *Daphnia magna* (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae

Kerosene C9-C16 : EL50: 1 - 3 mg/l
Exposure time: 72 h
Species: *Raphidocellus subcapitata* (algae)
Method: OECD Test Guideline 201

Distillates (petroleum),
Hydrotreated light EL50: 1 - 3 mg/l
Exposure time: 72 h
Species: *Pseudokirchneriella subcapitata* (green algae)
Method: OECD Test Guideline 201

Naphthalene EC50: 2.96 mg/l
Exposure time: 48 h
Species: *Selenastrum capricornutum* (algae)

Ethylbenzene ErC50: 5.0 mg/l
Exposure time: 96 h
Species: *Selenastrum capricornutum* (algae)

ErC50: 7.7 mg/l
Exposure time: 72 h
Species: *Skeletonema costatum* (Marine Algae)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Distillates (petroleum), Hydrotreated light	: NOEC: 0.48 mg/l Exposure time: 21 Days Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
Ethylbenzene	: NOEC: 1 mg/l Exposure time: 7 d Species: Daphnia pulex (Water flea) semi-static test Analytical monitoring: yes
Biodegradability	: Expected to be ultimately biodegradable
Elimination information (persistence and degradability)	
Bioaccumulation	
Kerosene C9-C16	: The product may be accumulated in organisms.
Distillates (petroleum), Hydrotreated light	: The product may be accumulated in organisms.
Kerosine, petroleum, hydrodesulfurized	: The product may be accumulated in organisms.
Ethylbenzene	: Bioconcentration factor (BCF): 110
Mobility	
Kerosene C9-C16	: No data available
Distillates (petroleum), Hydrotreated light	: No data available
Kerosine, petroleum, hydrodesulfurized	: No data available
Ethylbenzene	: Method: Calculation, Mackay Level I Fugacity Model Disperses rapidly in air.
Results of PBT assessment	
Ethylbenzene	: Non-classified vPvB substance, Non-classified PBT substance
Additional ecological information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	
Kerosene C9-C16	: Toxic to aquatic life.
Distillates (petroleum), Hydrotreated light	: Toxic to aquatic life.
Kerosine, petroleum, hydrodesulfurized	: Toxic to aquatic life.
Naphthalene	: Very toxic to aquatic life.
Ethylbenzene	: Toxic to aquatic life.

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Long-term (chronic) aquatic hazard Kerosene C9-C16	: Toxic to aquatic life with long lasting effects.
Distillates (petroleum), Hydrotreated light Kerosine, petroleum, hydrodesulfurized Naphthalene	: Toxic to aquatic life with long lasting effects. : Toxic to aquatic life with long lasting effects. : Very toxic to aquatic life with long lasting effects.
Ethylbenzene	: Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III, (37.8 °C c.c.), MARINE POLLUTANT, (KEROSENE C9-C16)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS, (KEROSENE C9-C16)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

30,UN1863,FUEL, AVIATION, TURBINE ENGINE, 3, III, ENVIRONMENTALLY HAZARDOUS, (KEROSENE C9-C16)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN1863, FUEL, AVIATION, TURBINE ENGINE, 3, III, ENVIRONMENTALLY HAZARDOUS, (KEROSENE C9-C16)

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information**National legislation**

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Aspiration hazard
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

CERCLA Reportable Quantity : 2857 lbs
Naphthalene

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

SARA 302 Threshold Planning Quantity : This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA 313 Components : The following components are subject to reporting levels established by SARA Title III, Section 313:
: Naphthalene - 91-20-3
Ethylbenzene - 100-41-4

Clean Air Act

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):
 : Naphthalene - 91-20-3
 Ethylbenzene - 100-41-4

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):
 : Ethylbenzene - 100-41-4

US State Regulations**Pennsylvania Right To Know**

: Distillates (petroleum), Hydrotreated light - 64742-47-8
 Kerosene C9-C16 - 8008-20-6
 Kerosine, petroleum, hydrodesulfurized - 64742-81-0
 Naphthalene - 91-20-3
 Ethylbenzene - 100-41-4

California Prop. 65 Components

: WARNING! This product contains a chemical known in the State of California to cause cancer.

Naphthalene	91-20-3
Ethylbenzene	100-41-4

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/food.

Naphthalene	91-20-3
Ethylbenzene	100-41-4

Notification status

Europe REACH	: Not in compliance with the inventory
Switzerland CH INV	: Not in compliance with the inventory
United States of America (USA) TSCA	: On or in compliance with the active portion of the TSCA inventory

Jet A Aviation Fuel

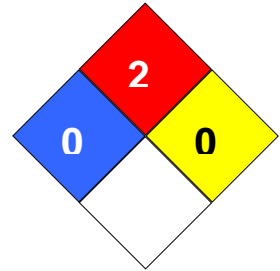
Version 2.8

Revision Date 2024-09-17

Canada DSL	:	All components of this product are on the Canadian DSL
Australia AIIC	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	Not in compliance with the inventory
Korea KECI	:	A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).
Philippines PICCS	:	On the inventory, or in compliance with the inventory
Taiwan TCSI	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 0
Fire Hazard: 2
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 1975

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect

Jet A Aviation Fuel

Version 2.8

Revision Date 2024-09-17

			Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate