



Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date: 04/30/2015 Supersedes: 06/01/2004 Version: 1.0

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

1.1. Product identifier

Product name : Jet A
Product form : Mixture
Formula : A complex mixture of paraffins, cycloparaffins, olefins and aromatic hydrocarbons. Contains minor amounts of sulfur (< 0.05%). May contain a trace of benzene (< 0.01%).
Other means of identification : Aviation Turbine Fuel, Jet A Turbine Fuel

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

Use of the substance/mixture : Aviation Fuel

1.3. Details of the supplier of the safety data sheet

Apex Oil Company, Inc.
Clark Oil Trading Company
Enjet, LLC
8235 Forsyth Boulevard, Suite 400
St. Louis, Missouri 63105
General Assistance 1-314-889-9600

1.4. Emergency telephone number

Emergency number : Chemtrec: 1-800-424-9300 (Apex reference number: 225708)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

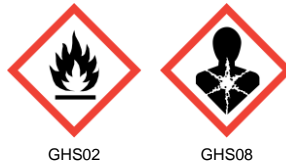
GHS-US classification

Flam. Liq. 2 H225
Muta. 1B H340
Carc. 1A H350
STOT RE 1 H372
Asp. Tox. 1 H304

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H340 - May cause genetic defects
H350 - May cause cancer
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER
P303+P361+P353 - IF ON SKIN (or hair): Immediately take off all contaminated clothing. Rinse skin with water/shower
P308+P313 - If exposed or concerned: Get medical advice/attention
P314 - Get medical advice/attention if you feel unwell
P331 - Do NOT induce vomiting
P370+P378 - In case of fire: Use carbon dioxide (CO₂), dry extinguishing powder, foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Kerosine, petroleum	(CAS No) 8008-20-6	95 - 100
Benzene	(CAS No) 71-43-2	< 3

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

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

- Symptoms/injuries : May be fatal if swallowed and enters airways. May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure.
- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.
- Chronic symptoms : May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Carbon dioxide. Dry powder. Sand.
- Unsuitable extinguishing media : Do not use direct water stream. May spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
- Explosion hazard : Heating may cause an explosion.
- Reactivity : Flowing product can be ignited by self-generated static electricity.

5.3. Advice for firefighters

- Precautionary measures fire : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
- Other information : Material will float and can be re-ignited on surface of water. Flowing product can be ignited by self-generated static electricity. Clothing, rags or similar organic material contaminated with this product and stored in a closed space may undergo spontaneous combustion.

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Eliminate ignition sources. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Sweep or shovel spills into appropriate container for disposal. Recover as much product as possible with vacuum truck or pump to storage/salvage vessels. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Use appropriate personal protection equipment (PPE). Immediately rinse contaminated clothing thoroughly with water. Use only in well-ventilated areas. Avoid breathing vapors, mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep the container tightly closed. Store in original container. Avoid temperature extremes. Keep away from ignition sources. Ground and bond all transfer and storage equipment.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Benzene (71-43-2)	
ACGIH TWA (ppm)	0.5
ACGIH STEL (ppm)	2.5
OSHA PEL (TWA) (ppm)	1
OSHA PEL (STEL) (ppm)	5 (see 29 CFR 1910.1028)
OSHA PEL (Ceiling) (ppm)	25
Kerosine, petroleum (8008-20-6)	
ACGIH TWA (mg/m ³)	200 application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor
Remark (OSHA)	OELs not established

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Personal protective equipment : Gloves. Protective goggles. Wear chemically impervious apron over labcoat and full coverage clothing. Insufficient ventilation: wear respiratory protection.



Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. . Suitable gloves for this specific application can be recommended by the glove supplier.

Eye protection : Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection : Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment with gas filter (type A2). Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid.
Color	: Transparent. light brown. amber. Clear.
Odor	: Petroleum-like odor. Oily Odor.
Odor Threshold	: 0.02 ppm ("rotten egg")
pH	: No data available
Relative evaporation rate (butylacetate=1)	: > 10
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 177 - 371 °C (350 - 700 °F)
Flash point	: 38 - 82 °C (100 - 180 °F)
Auto-ignition temperature	: > 260 °C (500 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 0.4 mm Hg (0.053 kPa) @ 20 °C (68 °F)
Relative vapor density at 20 °C	: > 1 (Air = 1)
Relative density	: 0.81 (typical)
Solubility	: Insoluble. Water: Floats on water
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: > 1.3 cSt (0.013 cm ² /s) (40 °C)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.6 - 7.5 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flowing product can be ignited by self-generated static electricity.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.4. Conditions to avoid

Avoid contact with : Ignition sources. Incompatible materials.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Thermal decomposition generates : Hydrocarbons. Carbon oxides (CO, CO₂). Water. Organic acids. Aldehydes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Benzene (71-43-2)	
LD50 dermal rabbit	> 8200 mg/kg
LC50 inhalation rat (mg/l)	44.66 mg/l/4h (vapor)

Kerosine, petroleum (8008-20-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.28 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : May cause genetic defects.
Carcinogenicity : May cause cancer.

Benzene (71-43-2)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard : May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation : May cause respiratory irritation.
Symptoms/injuries after skin contact : May cause skin irritation.
Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating.
Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.
Chronic symptoms : May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No information available.

12.2. Persistence and degradability

Jet A	
Persistence and degradability	No information available.

12.3. Bioaccumulative potential

Jet A	
Bioaccumulative potential	No information available.

12.4. Mobility in soil

Jet A	
Ecology - soil	No information available.

12.5. Other adverse effects

Other adverse effects : No data available.

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

In accordance with DOT

- Transport document description : UN1863 Fuel, aviation, turbine engine (Contains: Benzene), 3, III
- UN-No.(DOT) : 1863
- DOT NA no. : UN1863
- Proper Shipping Name (DOT) : Fuel, aviation, turbine engine
Contains: Benzene
- Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- Hazard labels (DOT) : 3 - Flammable liquid



- Packing group (DOT) : III - Minor Danger
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
- DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information

- Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Jet A

All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substances Control Act) Inventory
All the constituents of this preparation are registered in the EINECS inventory or in the ELINCS list

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
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Benzene (71-43-2)

Section 302 (EHS) TPQ	
Section 304 EHS RQ	
CERCLA RQ	10 lb
Section 313	Listed on US SARA Section 313

15.2. International regulations

CANADA

Unleaded Gasoline (NO Ethanol)

All chemical substances in this product are listed on the Canadian DSL (Domestic Substances List)

15.3. US State regulations

California Proposition 65

WARNING! This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Jet A

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Benzene (71-43-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	Yes	No	Yes	6.4 (oral) µg/day 13 (inhalation) µg/day

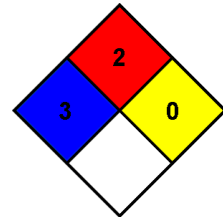
Benzene (71-43-2)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Kerosine, petroleum (8008-20-6)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

Indication of changes : Revision 1.0: New SDS Created.
Revision date : 04/30/2015
Other information : Author: BCS.

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 3*
Flammability : 2
Physical : 0
Personal Protection :

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