

Alpha Resources Inc.

Safety Data Sheet (SDS)

Revision Date: April 7, 2015

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

JP Aviation Fuel Standard

AR2920, AR2921, AR2922, AR2923, AR2924, AR2925, AR2926, AR2927, AR2928, AR3026, AR5201

This product is intended for laboratory use.

Alpha Resources Inc. 3090 Johnson Rd. Stevensville, MI 49127 (269)465-5559

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word: DANGER

SECTION 2— HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3), Corrosive: Skin corrosion/irritation (Category 2), hazardous to the aquatic environment/chronic toxicity (Category 3), and aspiration hazard (Category 1)

Hazard statement: Flammable liquid and vapor (H226), causes skin irritation (H315), may be fatal if swallowed and enters airways (H304), may cause drowsiness or dizziness (H336), and toxic to aquatic life with long lasting effects (H411).

Precautionary statement: Keep away from heat /sparks/open flames/ hot surfaces, no-smoking(P210), keep/store away from cloth/combustible materials (P220), wear protective gloves/eye protection/face protection (P280), If On Skin: wash with plenty of soap and water (P302+P352, if swallowed: immediately call a poison center or doctor/physician (P301+P310), do not induce vomiting (P331), store in a well-ventilated place. Keep container tightly closed (P403+P233), Store locked up (P405), dispose of contents/container to an approved waste disposal plant (P501).

Environmental Effects: Components of this product are hazardous to aquatic life (Category 2). May cause long-term adverse effects in environment (H411).



SECTION 3— COMPOSITION, INFORMATION ON INGREDIENTS

Hazardous substance required for disclosure.

Component	CAS #	Concentration %
Distillates (petroleum), hydrotreated light	64742-47-8	<100
Kerosene (petroleum), hydrodesulfurized	64742-81-0	<100
Kerosene (petroleum)	8008-20-6	<100
Naphthalene	91-20-3	<1

Concentrations are percent by weight unless ingredient is a gas and is represented in percent by volume.

SECTION 4— FIRST AID MEASURES

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340). If breathing is difficult qualified personnel may administer Oxygen. If not breathing give artificial respiration if qualified. Seek medical attention.

If on skin: Wash with plenty of water. (P302+P352). Wash contaminated clothing before reuse (P363). Consult physician.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists:** Get medical advice or attention (P337+P313).

If swallowed: Aspiration hazard: do not induce vomiting or give anything by mouth this material can enter the lungs and cause severe damage. If victim is drowsy or unconscious and vomiting, place on left side with head down. Do not leave victim alone and keep a close watch on breathing. Seek medical attention.

Additional Information: Make certain that the medical personnel are aware of the materials that the individual was exposed to.

SECTION 5 — FIRE FIGHTING MEASURES

Flammable properties: Flammable material that can be ignited by sparks, heat, flames, or other ignition sources. Vapors can travel substantial distances to reach a source of ignition. Could create vapor/air explosion hazard indoors, confined space, outdoors, and even in sewers. This product will float and can be re-ignited on the surface of water.

Extinguishing media: Use a dry chemical, carbon dioxide, or foam extinguisher. Water spray any exposed materials or structures for cooling purposes. Use caution when applying carbon dioxide in confined spaces. Using a foam and water on the same surface should be avoided because the water destroys the foam.

Advice for Firefighters: Use the necessary firefighting attire that would protect from extreme heat and flame. Wear self-contained breathing apparatus for firefighting when required. Use appropriate protocol while trying to contain the blaze and consider the other involved materials associated with this hazard. Keep unauthorized personnel away from danger.

Hazardous combustion products: The combustion of this material will create smoke, carbon monoxide, and other products. Oxides of Nitrogen and Sulfur may form.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: flammable material, spilling this material will develop a fire hazard and could cause the atmosphere to be explosive. Keep all sources of ignition away from the spill site. Explosion proof electrical equipment is necessary when available. Use the proper personal protective equipment that is available. Avoid breathing vapors, mist, or gas. Be sure to work under proper ventilation. Evacuate personnel to areas not affected. Avoid breathing any fine particles.

Methods of cleanup: Contact any necessary authorities per regulations. Clean up spill as quickly as possible. Absorb release with inert material and place in designated disposal container. If soil has been contaminated remove the area of spill for remediation or disposal in accordance with regulations.

Environmental precautions: At all costs the discharge into environment must be avoided. This product should be prevented from entering any sewers and water sources. Prevent further leakage where necessary. Use minimal water to reduce environmental contamination. Notify the proper authorities when applicable.

SECTION 7 — HANDLING AND STORAGE

Handling: Keep away from any sources of ignition. Take precautionary measure against static discharge. The use of non-sparking tools is necessary. Wear the proper personal protection equipment. Wash thoroughly after handling. Use good hygiene practice when in contact. The vapor is heavier than air and could create an explosive mixture of vapor and air. This can become concentrated in low-lying areas and confined spaces. Explosion proof electrical equipment is required with this material. Using hydrocarbon fuels in poor ventilated areas can result in hazardous conditions. To prevent static discharge, practice bonding and grounding techniques where needed to be cautious.

Storage: This material needs to be kept tightly closed and correctly labeled. Store in a cool, dry, well ventilated area that is away from any sources of ignition. Store in approved containers only. Outdoor storage is preferred. If indoor storage is only available option, it needs to meet OSHA standards and fire codes.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limit Values:

Component	ACGIH	OSHA	Other
Distillates (petroleum), hydrotreated light	TWA: 200mg/m ³ Skin (based on Kerosene 8008-20-6)		
Kerosene (petroleum), hydrodesulfurized	TWA: 200mg/m ³ Skin (based on Kerosene 8008-20-6)		
Kerosene (petroleum)	TWA: 200mg/m ³ Skin (based on Kerosene 8008-20-6)		
Naphthalene	STEL: 15ppm TWA: 10ppm 2ppm TWA; skin; A3-confirmed animal carcinogen with unknown relevance to humans; TLV basis upper respiratory tract irritation Skin	TWA 10ppm: 50mg/m ³	TWA: 0.2 mg/m ³ (as total of 17 PNA's measured by NIOSH Method 5506)

Note: Other agencies or advisory groups may have established other limits. Consult an industry professional if questions arise.

Engineering Controls: This material should be handled in accordance to good lab practices in regards to safety and hygiene. Wash hands before breaks and at end of workday.

Personal Protection: Respiratory protection could be required if adequate ventilation has not been achieved. A full-face respirator type N100 or type P3 respirator cartridges as a backup to ventilation controls. If there is no ventilation in place, a full-face supplied air respirator is required. Use of government standard respirators or components should be used when necessary.

Hand Protection: Glove suitability will differ depending on the end use of product. Chemical resistant gloves can provide an excellent barrier of protection. Gloves should be inspected before use and proper glove removal techniques should be performed to avoid any contact with this material. Wash and dry hands after use.

Eye/face protection: Safety glasses with side shields are necessary if splashing is possible. An emergency eye wash station and emergency shower should be available in close proximity to work area.

Skin and Body Protection: Chemical and oil resistant clothing are recommended for extended periods of contact.

Hygiene: Wash hands and areas of possible exposure after handling material especially before eating, drinking, and smoking. The work clothing should also be washed regularly to remove any contaminants. Dispose of contaminated clothing that can't be deemed safe.

Environmental: DO NOT! Let product enter water ways or sewers.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health, and environmental considerations only and may not represent the products specifications. Contact supplier for additional information.

Colorless	Odor: Kerosene	Vapor pressure: <1 mm Hg
Melting Point: N/A	Boiling Point: >32°C	Vapor Density: >1
Refractive index: N/A	Soluble (water): negligible	Specific Gravity: 0.80 @ 15.6 °C
Flash point: >46 °C	Auto-Ignition Temperature: N/A	Lower Explosive Limits (vol% in air): 0.7
Upper Explosive Limits (vol% in air): 5.0		

SECTION 10 — STABILITY AND REACTIVITY

Stable material at normal laboratory conditions.

Avoid: Keep excessive heat away from material. Keep clear of sources of ignition. Prevent vapor accumulation.

Incompatible: Strong oxidizing agents and strong reducing agents.

Hazardous Decomposition: Not expected

Hazardous Polymerization: Not expected

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicity	Hazard	LC50/LD50 Data
Inhalation	Expected to have a low degree of toxicity by inhalation.	>5.2mg/L (mist)
Skin absorption	Not likely to be harmful	>2g/kg
Ingestion (swallowing)	Not likely to be harmful	>5g/kg

Toxicological effects of mixture

Aspiration Hazard: Might be fatal if swallowed and enters airways.

Serious eye damage/irritation: Can cause mild eye irritation.

Signs and symptoms: High concentration of vapors can result in respiratory irritation, headache, drowsiness, dizziness, loss of coordination, disorientation, and fatigue. Ingestion can result in irritation of the digestive tract, nausea, diarrhea, and vomiting.

Chronic effects: Prolonged exposure may cause chronic effects.

Acute effects: May cause drowsiness or dizziness.

Carcinogenicity: Not cancer causing. Petroleum distillates have been shown to create skin tumors in mice after chronic exposure and skin contact.

Mutagenicity: N/A

Reproductive toxicity: N/A

Skin corrosion/irritation: Skin irritation can occur. Repeated exposure can result in cracking or dryness of skin.

Toxicological Effects of components: Naphthalene's carcinogenicity has been researched in a two year study in both rats and mice. The US national Toxicology Program has come to the conclusion that male and female rats have shown evidence that this material is carcinogenic based on elevated instances of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. Naphthalene has been identified as a carcinogen by IARC and NTP.

SECTION 12 — ECOLOGICAL INFORMATION

Aquatic toxicity: Studies of this material streams show that acute toxicity values of more than 1mg/L and most in the range of 1-100mg/L. Results are the same as predicted aquatic toxicity considering their hydrocarbon composition. Kerosenes should be labeled as toxic to aquatic organisms with the possibility of causing long term adverse effects in the aquatic environment.

Classification: H411; Chronic Cat 2.

Bioaccumulative potential: Hydrocarbon constituents of kerosene display measure and predicted Log Kow values from 3 to 6 and even higher. This would be noted as having the potential to bioaccumulate. Metabolic processes could reduce bioconcentration.

Persistence and degradability: The hydrocarbons in this material are not readily biodegradable but are thought of as inherently biodegradable.

Persistence per IOPC fund definition: Non-persistent

Mobility in soil: When released into water the hydrocarbons will float on top and could be adsorbed on sediment where water reaches land. Biodegradation in water is a small loss. In air, these hydrocarbons are photodegraded by reaction with hydroxyl radicals with half-lives varying from 0.1 to 0.7 days.

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste disposal: Collect product and reclaim or dispose in sealed containers at a licensed waste disposal site. Dispose of contents/container in accordance with local, regional, national, and international regulations.

Hazardous Waste code: The waste code should be assigned in discussion with the user, the producer, and the waste disposal company. Dispose in accordance with all applicable regulations.

Waste from residues: Dispose of in accordance with local regulations. Empty all containers or liners that may retain residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14 — TRANSPORT INFORMATION

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
DOT	UN1863	FUEL, AVIATION, TURBINE ENGINE (naphthalene)	Combustible Liquid	III	Not determined	Reportable quantity 100lbs.
TDG	UN1863	FUEL, AVIATION, TURBINE ENGINE	3	III	Not determined	N/A
IMDG	UN1863	FUEL, AVIATION, TURBINE ENGINE	3	III	Not determined	N/A
IATA	UN1863	FUEL, AVIATION, TURBINE ENGINE	3	III	Not determined	N/A

Special precaution for user: Read safety instructions, SDS and emergency procedures before handling.

SECTION 15 — REGULATORY INFORMATION

U.S. Federal regulations: US Inventory (TSCA) In compliance

TSCA 12(b) one-time export notification:: NAPHTHALENE

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4): NAPHTHALENE: 100 lbs. (45.36 kg); Ethylbenzene: 1000 lbs. (453.6 kg);

State regulations

Massachusetts RTK: KEROSENE; NAPHTHALENE; Ethylbenzene

New Jersey: KEROSENE; NAPHTHALENE; Ethylbenzene

Pennsylvania RTK: KEROSENE (generic environmental hazard); NAPHTHALENE (environmental hazard, generic environmental hazard); Ethylbenzene (environmental hazard, generic environmental hazard)

WARNING: This product contains chemical(s) known to the state of California to cause cancer,

birth defects or other reproductive harm: NAPHTHALENE; Ethylbenzene

Form R- Reporting requirements/Supplier notification

NAPHTHALENE 91-20-3 0.5 - 1

Ethylbenzene 100-41-4 0 - 0.5

SECTION 16 — OTHER INFORMATION

The data and information as stated was furnished by the manufacturer/vendor/supplier of this product. Alpha Resources Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.
