4 Silicon Road, Mariann
Industrial Park, Pinetown, 4147
PO Box 28460, Malvern, 4055

Tel: (031) 791 0710
Fax: (031) 464 5170
Email: info@jagpetroleum.co.za
Website: www.jagpetroleum.com

Section 1: Chemical Product and Company Identification

Product Name	:	Paraffin
Synonym	:	Lamp Oil, Illuminating Kerosine
Use	:	Fuel
Company Identification	:	4 Silicon Road, Mariann Industrial Park, Pinetown, 4147
Health Emergency Telephone	:	10111
Contact Info	:	info@jagpetroleum.co.za
JAG Website	:	www.jagpetroleum.com

Section 2: Composition and Information on Ingredients

Substance/Preparation

Chemical Name*	**CAS No.**	**%**	**EC Number**	**Classification**
Naphtha (petroleum), hydrosulfurized heavy	64742-82-1	>60	265-185-4	Carc. Cat. 2;R45 Xn;R65
Kerosine (petroleum) heptane	8008-20-6 142-82-5	0-20 5-10	232-366-4 205-563-8	Xn,R65 F;R11 Xn;R65 Xi; R38 R67 N; R50/53
Methylcyclohexane	108-87-2	5-10	203-624-3	F;R11 Xn;R65 Xi;R38 R67 N;R51/53
Octane	111-65-9	0-10	203-892-1	F;R11 Xn;R65 Xi;R38 R67 N;R50/53
Toluene	108-88-3	1-5	203-625-9	F;R11 Xn;R20
Xylene	1330-20-7	1-5	215-535-7	R10; Xn;R20/21 Xi;R38

Nonane	111-84-2	1-5 203-913-4	R10 Xn;R20 Xi;R36/38
Cyclohexane	110-82-7	1-5 203-806-2	F;R11

			Xn;R65 Xi;R38 R67 N;R50/53
Butane	106-97-8	0-5 203-448-7	F+; R12 Carc. Cat 1;R45
Paraffin			

* Occupational exposure limit(s), if available, are listed in section 8

Section 3: Hazards Identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F; R10
Carc. Cat. 1; R45
Muta. Cat. 2; R46
N; R51/53

Additional Hazards : None identified.

Effects and symptoms : Hazardous in case of skin contact (permeator), of ingestion, of inhalation. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of Breath.

Aggravating conditions : Repeated or prolonged exposure to spray mist may produce Respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. Repeated exposure may cause skin dryness or cracking.

See Toxicological Information (section 11)

Section 4: First Aid Measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give Artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Notes to physician : No specific treatment, treat symptomatically. If breathing is difficult give oxygen, if respiratory arrest occurs provide artificial respiration and seek immediate medical assistance.

Protection of first-aiders : No additional remark.

Section 5: Fire-Fighting Measures

Suitable extinguishing media : SMALL FIRE: Use DRY chemical powder
LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Specific Firefighting procedures : Fire fighters should wear positive pressure self-contained

breathing apparatus (SCBA) and full turnout gear.

Hazardous thermal Decomposition Products : These products are carbon oxides (CO, CO2). Some metallic oxides.

Protection of fire-fighters : Be sure to use an approved/certified respirator or equivalent.

Unusual fire/explosion hazards : None.

Section 6: Accidental Release Measures

Personal precautions : Face shield. Full suit. Vapor respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Environmental precautions and clean-up methods : Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non- combustible material. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7: Handling and Storage

Safe handling advice : Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Packaging materials

Recommended use : Use original container.

Section 8: Exposure Controls/Personal Protection

Engineering measures : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hygiene measures : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient Name	Occupational Exposure Limits
kerosine (petroleum)	ACGIH TLV (United States, 2003). Skin Notes: Refers to Appendix A -- Carcinogens. ACGIH 2003 Adoption Application restricted to conditions in which there are negligible aerosol exposures. TWA: 200 mg/m3 8 hour(s).
Heptane	EU OEL (Europe, 2000). Notes: Indicative TWA: 2085 mg/m3 8 hour(s). TWA: 500 ppm 8 hour(s).
Methylcyclohexane	ACGIH TLV (United States, 2003). TWA: 1610 mg/m3 8 hour(s). TWA: 400 ppm 8 hour(s).

Octane	ACGIH (United States, 1994). TWA: 300 ppm STEL: 375 ppm TWA: 1400 mg/m3 STEL: 1750 mg/m3 ACGIH TLV (United States, 2003). Notes: 1999 Adoption. TWA: 300 ppm 8 hour(s).
Toluene	ACGIH (United States, 1996). Skin TWA: 50 ppm TWA: 188 mg/m3 ACGIH TLV (United States, 2003). Skin Notes: 1996 Adoption Refers to Appendix A -- Carcinogens. TWA: 188 mg/m3 8 hour(s). TWA: 50 ppm 8 hour(s).
Xylene	EU OEL (Europe, 2000). Skin Notes: Indicative STEL: 442 mg/m3 15 minute(s). STEL: 100 ppm 15 minute(s). TWA: 221 mg/m3 8 hour(s). TWA: 50 ppm 8 hour(s).
Nonane	ACGIH (United States, 1994). TWA: 200 ppm TWA: 200 mg/m3 CEIL: 250 mg/m3 ACGIH TLV (United States, 2003). TWA: 1050 mg/m3 8 hour(s). TWA: 200 ppm 8 hour(s).
Cyclohexane	ACGIH TLV (United States, 2003). TWA: 100 ppm 8 hour(s).
butane (containing >= 0.1% butadiene (203-450-8))	ACGIH (United States, 1994). TWA: 800 ppm TWA: 1900 mg/m3 ACGIH TLV (United States, 2001). TWA: 1900 mg/m3 8 hour(s).
Date of Issue	07/08/2003
Paraffin	TWA: 800 ppm 8 hour(s).

Recommended monitoring Procedure : No additional remark.

Personal protective equipment

Respiratory system : Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Skin and body : Full suit.

Hands : Chemical resistant gloves.

Eyes : Face shield.

Section 9: Physical and Chemical Properties

Physical State : Liquid. (Clear to slightly hazy liquid).

Colour : Colourless

Odour : Hydrocarbons

Odour Threshold : The lowest known value is 1 ppm (Kerosine (petroleum)) Weighted Average: 141.04 ppm.

Boiling Point : The lowest known value is 80.61°C (177.1°F) (Cyclohexane). Weighted average: 153.02°C (307.4°F).

Melting Point : May start to solidify at 6.72°C (44.1°F) based on data for: Cyclohexane. Weighted average:-68.31°C (-91°F).

Density : Weighted average: 0.77 g/cm3

Vapour Density : The highest known value is 4.5 (Air = 1)(Kerosine (petroleum)). Weighted average: 3.78 (Air= 1)

Vapour Pressure : The highest known value is 6.1 kPa (46 mmHg) (at 20°C) (Methylcyclohexane).

Evaporation Rate (Butyl Acetate = 1) : The highest known value is 5.6 (Cyclohexane) Weighted average: 2.64compared to Butyl acetate.

Solubility in		Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. Insoluble in cold water, hot water.
Octanol/water partition Co-efficient	:	This product is much more soluble in octanol.
pH	:	Not applicable.
Flash Point	:	>430C.
Autoignition Temperature	:	>2300C.
Explosion limits	:	The greatest known range is LOWER: 1.33% UPPER: 8.35% (Cyclohexane).
Viscosity	:	Not available.

Section 10: Stability and Reactivity Data

Stability	:	The product is stable
Conditions to avoid	:	Avoid all possible sources of ignition (spark or flame).
Materials to avoid	:	Reactive with oxidising agents, acids.
Hazardous Decomposition Products	:	Carbon oxides. Some metallic oxides.
Hazardous Polymerization	:	Will not occur.

Section 11: Toxicological Information

Acute oral toxicity	:	Fuels, diesel Gasoil - unspecified: LD50 : 7,500 mg/kg; (literature value).
Acute inhalation toxicity	:	Fuels, diesel Gasoil - unspecified: LC50 rat: < 10 mg/l; ; 4 h(literature value).
Acute dermal toxicity	:	Fuels, diesel Gasoil - unspecified: LD50 rabbit: > 2,000 mg/kg; (literature value).
Skin irritation	:	Fuels, diesel Gasoil - unspecified: rabbit: Severe skin irritation;

Section 12: Ecological Information

Ecotoxicity effects

General advice	:	No data available.

Section 13: Disposable Considerations

Product	**:**	**Dispose of in accordance with local regulations.**
Contaminated packaging in	**:**	**Store containers and offer for recycling of material when in accordance with the local regulations.**

Section 14: Transport Information

ADR	:	UN-No1 202; Class: 3; Packaging group: III; F1; Description of the goods: DIESEL FUEL
RID UN-No	:	1202; Class: 3; Packaging group: III; F1; Description of the goods: DIESEL FUEL.
ADNR UN-No	:	1202; Class: 3; Packaging group: III; F1; Description of the goods: DIESEL FUEL.
IMDG UN-No	:	1202; Class: 3; EmS: F-E, S-E; Packaging group: III; Description of the goods:
ICAO/IATA UN-No	:	1202; Class: 3; Packaging group: III; Description of the goods: Diesel fuel.

Section 15: Other Regulatory Information

Regulatory base 67/548/EEC
Symbol(s) Xn: Harmful.
R-phrase(s) R40: Possible risks of irreversible effects.
S-phrase(s) S 2: Keep out of the reach of children.
S36/37: Wear suitable protective clothing and gloves.

Hazardous components which must be listed on the label : Fuels, diesel Gasoil – unspecified.

Section 16: Other Information

Full text of R-phrases referred to under sections 2 and 3:
R40 Possible risks of irreversible effects.