Material Safety Data Sheet
High Flash Kerosene

Bituminous Products Pty Ltd
33 Violet Street
REVESBY, NSW, 2212

ABN No: 19 106 887 094
Business Phone: 02 9772 4433
Facsimile Phone: 02 9792 1016

EMERGENCY CONTACT: Neil Morcombe (Bus) 02 9772 4433
(A/H) 0414 499 402

Section 1: IDENTIFICATION

HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA

IDENTIFICATION

Product Name: HFK

Other Names: High Flash Kerosene; Distillates; Petroleum, straight-run, medium.

Use: Industrial Solvent

UN Number Not Applicable

Dangerous Goods Class Not Applicable

Subsidiary Risk: Not Applicable

Packing Group Not Applicable

Hazchem Code: Not Applicable

CAS Number: 64741-44-2

COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components:
Kerosene CAS # 64741-44-2 % vol 95-100

Additional Information:
Contains <110ppm Sulphur, CAS # 7704-34-9. Contains <3.0% Naphthalene, CAS # 91-20-3. Contains a range of Polyaromatic Hydrocarbons <9.0%.
Material Safety Data Sheet

High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

Risk/Safety Phrases:
S2 Keep out of reach of children.
R38 Irritating to the skin S24 Avoid contact with skin
R65 May cause lung damage if swallowed S46 If swallowed seek medical advice immediately and show this container or label.
R52/53 Harmful to Aquatic organisms, may cause long term adverse effects in the aquatic environment.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container.

PHYSICAL DESCRIPTION/PROPERTIES (TYPICAL VALUES)

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Units</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Mobile Liquid</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Clear to Straw</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Density @15°C</td>
<td>ASTM D 1298 kg/L</td>
<td>0.790-0.810</td>
</tr>
<tr>
<td>Boiling Point (95%)</td>
<td>ASTM D 86 °C</td>
<td>&lt;340°C</td>
</tr>
<tr>
<td>Vapour Pressure @20°C</td>
<td>ASTM D 323 kPa</td>
<td>NA</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;74.5°C</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>LEL: 0.6% UEL: 7.0% (typical)</td>
<td></td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Negligible</td>
<td></td>
</tr>
</tbody>
</table>

Supplier:
BITUMINOUS PRODUCTS PTY LTD
33 Violet Street Revesby NSW 2212
Phone: 61 2 9772 4433
Fax: 61 2 9792 1016
Contact: Neil Morcombe (mobile 0414 499 402)

Section 2: HAZARDS IDENTIFICATION

Signs and Symptoms: Exposure may result in respiratory irritation, dizziness, nausea, loss of consciousness. Prolonged skin contact may result in skin irritation. Low viscosity material if swallowed may enter lungs and cause lung damage. Contains material which is carcinogenic and material that is potentially carcinogenic.

FIRST AID MEASURES
Eye Contact: Flush thoroughly with water. Obtain medical advice if any pain or redness develops or persists.
Material Safety Data Sheet
High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

Skin Contact: Wash contact areas with water. Remove contaminated clothing. Launder contaminated clothing before re-use.

Inhalation: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with bag-valve-mask devise or use mouth-to-mouth resuscitation.

Ingestion: Seek immediate medical attention. Do not induce vomiting.

Advice to Physician: Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

FIRE-FIGHTING MEASURES
Flammability: Combustible
Flash Point: >74.5°C
LEL: 0.6% (typical)
UEL: 7.0% (typical)

Specific Hazards: Carbon monoxide may be evolved if incomplete combustion occurs. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Hazardous combustion products may include: Oxides of sulphur.

Extinguishing Media: Foam, Dry chemical, CO2, and water fog.

Special Fire Fighting Procedures:
Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering waterways, sewers or drinking water supply. For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES
Observe all relevant local and international regulations.

Notification Procedure: Report spills as required to appropriate authorities such as local Environmental Health Officer or Fire Brigade. If spills are likely to enter
Material Safety Data Sheet

High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

any drain, waterway or groundwater, contact the area water Authority. In case of accident or road spill, contact police and fire brigade and if appropriate, the Area Water Authority.

Spill/Release Procedure:
Eliminate all ignition sources. Contain and adsorb on suitable chemical absorbent material, etc. Shovel up and dispose of at an appropriate licensed waste disposal site in accordance with current applicable laws and regulations and product characteristics at time of disposal. Remove leaking containers to detached area.

Environmental Procedures:
Prevent spills from entering storm sewers or drains and contact with soil.

Section 3: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Occupational Exposure Limits:
Component CAS # Exposure Limit
Oil Mist 8012-95-1 5 mg/m3 TWA
Napthalene 91-20-3 10 ppm TWA
52 mg/m3 TWA
15 ppm STEL
79 mg/m3 STEL
Hydrogen Sulphide 7783-06-4 10 ppm TWA
14 mg/m3 TWA
15 ppm STEL
21 mg/m3 STEL


Control Measures: Provide exhaust ventilation or other engineering controls to keep airborne concentrations of vapours below respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to workstation locations.

Personal Protection
Eyes: Avoid contact with eyes. Wear chemical splash goggles.
Material Safety Data Sheet

High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

Skin and Body: Do no get on skin or clothing. Wear clothing and footwear that cannot be penetrated by chemicals or oil.

Respiratory: Use only with adequate ventilation. Avoid breathing vapour or mist. Approved air supplied respiratory protection should be worn whenever it is required for the worker’s face to be within 1m of an open hatch.

Hands: Wear chemical and oil resistant gloves. Consider conditions of work and use, and condition of gloves, when selecting gloves. Develop safety procedures for material handling practices for each intended application.

Section 4: STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use.

Conditions to Avoid: Heat, sparks, flame and build up of static electricity.

Incompatibility (Materials to Avoid): Strong oxidizers, Halogens, strong acids and alkalis. Do not allow molten material to contact water or liquids as this can cause violent eruptions, splatter hot material, or ignite flammable material.

Hazardous Decomposition Products: Product does not decompose at ambient temperatures. Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

Hazardous Polymerization: Will not occur.

Section 5: ECOLOGICAL INFORMATION

Mobility: Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Persistence/Degradability: This product is inherently biodegradable
Material Safety Data Sheet
High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

**Bioaccumulation:** There is no evidence to suggest bioaccumulation will occur.

### Section 6: TOXICOLOGICAL DATA

**Basis for Assessment:** Information given is based on product testing, and/or similar products, and/or components.

**Acute Oral Toxicity:** Harmful, may cause lung damage if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting. Aspiration into the lungs may result in chemical pneumonitis.

**Acute Inhalation Toxicity:** Mists and vapours generated may cause irritation of the upper respiratory tract. Inhalation of high concentration may lead to headache, dizziness, nausea, vomiting, drowsiness or narcosis.

**Skin Irritation:** May cause irritation to the skin that may result in redness, itchiness and swelling. Repeated or prolonged contact may dry and defat the skin, resulting in skin irritation and possibly lead to dermatitis.

**Eye Irritation:** May cause irritation in contact with the eyes, which can result in redness, stinging and tearing.

**Repeated Dose Toxicity:** Possible risk of irreversible effect. Prolonged or repeated skin contact may cause skin irritation leading to dermatitis. Repeated or prolonged inhalation of high vapour concentrations can cause drowsiness and lead to narcosis or death.

### Section 7: DISPOSAL CONSIDERATIONS

**Material Disposal:** Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. The product is suitable for burning in an enclosed, controlled burner for fuel value or disposed by supervised incineration.

**Local Legislation:** Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.
Material Safety Data Sheet

High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

Section 8: TRANSPORT INFORMATION

Australian ACTDG:
Not Regulated.

ICAO/IATA:
Not Regulated.

Section 9: Stability and Reactivity

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. Classified as a Combustible Liquid C1, AS 1940-2004.

Australian Classifications:
Shipping Name: Diesel Fuel
UN Number: Not Allocated
HAZCHEM Code: Not Allocated
Dangerous Goods Class/ Subsidiary Risk: Not Allocated
Packaging Group: Not Allocated
EC Labeling: The product is dangerous as defined by the European Union dangerous substances/preparations directives.

Section 10: Toxicological Information

HEALTH EFFECTS:

TOXICITY DATA INCLUDING SHORT AND LONG TERM EXPOSURE: None established

ACUTE:

SWALLOWED: Ingestion of material may cause irritation, nausea and vomiting.
EYES: Direct eye contact may cause irritation.
SKIN: Contact with skin can result in irritation.
INHALATION: Inhalation of vapour can result in headaches and dizziness.
Material Safety Data Sheet

High Flash Kerosene

Classified as hazardous according to criteria of NOHSC.

Section 11: Ecological Information

Do not allow product to enter waste water, rivers and creeks.

Section 12: Disposal Considerations

Disposal Methods:
- Wherever possible, reprocess or recycle any reclaimed material to reduce waste.
- Contained spills need to be soaked up and disposed into a metal container (avoid using plastic containers).
- The absorbed material may be disposed of as solid waste in conformity with the requirements of the Regulatory Authorities.

Section 13: Other Information

Contact Person: General Manager, Bituminous Products Pty Ltd - 02 9772 4433
After hours 0414 499 402

This Material Safety Data Sheet has been compiled in accordance with the Worksafe Australia National Code of Practice for the preparation of Material Safety Data Sheets {NOHSC: 2011 (2003)}.
Where applicable specific chemical composition details are provided to allow the product to be classified according to UN Number, HAZCHEM coding etc.
The information contained herein is based on the data available to BITUMINOUS PRODUCTS Pty Ltd from both our technical sources and from recognized published references and is believed to be both accurate and reliable.
BITUMINOUS PRODUCTS Pty Ltd has made no effort to censor nor to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and confirm whether they are appropriate. Due care should be taken to make sure that the use or disposal of the product is in compliance to the appropriate Federal, State, and Local Government regulations.

END OF MSD