1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
- **Product name**: HYDRAUNYCOIL FH 51
- **Synonym(s)**: NSN: 9150-00-252-6383 • NSN: XXXX-00-223-4134
  - FH 51 HYDRAUNYCOIL • FH51-1 - PRODUCT CODE

1.2 Uses and uses advised against
- **Use(s)**: HYDRAULIC FLUID

1.3 Details of the supplier of the safety data sheet
- **Supplier name**: INTERCHEM PTY LTD
- **Address**: 20 Harper Street, Abbotsford, Victoria, Australia, 3067
- **Telephone**: (03) 9270 9600
- **Fax**: (03) 9270 9666
- **Email**: info@interchem.com.au
- **Website**: http://www.interchem.com.au

1.4 Emergency telephone number(s)
- **Emergency**: (03) 9270 9600

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
- **CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA**
- **GHS Classification(s)**: Skin Corrosion/Irritation: Category 2
  - Acute Toxicity: Inhalation: Category 4
  - Aquatic Toxicity (Chronic): Category 2

2.2 Label elements
- **Signal word**: WARNING
- **Pictograms**: ! and 鱼

**Hazard statement(s)**
- H315: Causes skin irritation.
- H332: Harmful if inhaled.
- H411: Toxic to aquatic life with long lasting effects.

**Prevention statement(s)**
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264: Wash thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment. This statement does not apply where this is the intended use.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response statement(s)**
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P321: Specific treatment is advised - see first aid instructions.
- P332 + P313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before re-use.
- P391: Collect spillage.

**Disposal statement(s)**
- P501: Dispose of contents/container in accordance with relevant regulations.
2.3 Other Hazards
No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>EC number</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED LIGHT</td>
<td>64742-47-8</td>
<td>265-149-8</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>GAS OILS (PETROLEUM), HYDROSULPHURISED</td>
<td>64742-79-6</td>
<td>265-182-8</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>BUTYLATED HYDROXYTOLUENE</td>
<td>128-37-0</td>
<td>204-881-4</td>
<td>&lt;2.5%</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>Not Available</td>
<td>&gt;60%</td>
</tr>
<tr>
<td>PHENOL, ISOPROPYLATED, PHOSPHATE (3:1)</td>
<td>68937-41-7</td>
<td>273-066-3</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of first aid measures

**Eye**
If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation**
If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

**Skin**
If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion**
For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

First aid facilities
No information provided.

4.2 Most important symptoms and effects, both acute and delayed
No information provided.

4.3 Immediate medical attention and special treatment needed
Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media
Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture
Combustible. May evolve carbon oxides and hydrocarbons when heated to decomposition.

5.3 Advice for firefighters
Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code
- 3Z
  - Alcohol resistant foam is the preferred firefighting medium
  - Foam
  - Self Contained Breathing apparatus and protective gloves.

6. ACCIDENTAL RELEASE MEASURES
Product name: HYDRAUNYCOIL FH 51

6.1 Personal precautions, protective equipment and emergency procedures
Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions
Prevent product from entering drains and waterways.

6.3 Methods of cleaning up
Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all sources of ignition.

6.4 Reference to other sections
See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Ensure containers are adequately labelled and tightly closed when not in use. Store as a Class C1 Combustible Liquid (AS1940).

7.3 Specific end use(s)
No information provided.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters
Exposure standards

<table>
<thead>
<tr>
<th>Substance</th>
<th>Reference</th>
<th>TWA ppm</th>
<th>TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,6-Di-tert-butyl-p-cresol</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Mineral Oil Mist</td>
<td>SWA (AUS)</td>
<td>--</td>
<td>5</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

No biological limit values have been entered for this product.

8.2 Exposure controls
Engineering Controls
Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE
- **Eye/Face**: Wear splash-proof goggles.
- **Hand**: Wear nitrile or neoprene gloves.
- **Body**: Wear coveralls.
- **Respiratory**: Where an inhalation risk exists, wear a Type A (Organic vapour) respirator. If spraying, with prolonged use, or if in confined areas, wear an Air-line respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
- **Appearance**: LIQUID
- **Odour**: SLIGHT ODOUR
- **Odour Threshold**: NOT AVAILABLE
**Product name**: HYDRAUNYCOIL FH 51

- **pH**: NOT AVAILABLE
- **Melting Point**: -66°C
- **Boiling Point**: NOT AVAILABLE
- **Flash Point**: 94°C (cc)
- **Evaporation Rate**: NOT AVAILABLE
- **Flammability**: CLASS C1 COMBUSTIBLE
- **Upper Explosion Limit**: NOT AVAILABLE
- **Lower Explosion Limit**: NOT AVAILABLE
- **Vapour Pressure**: NOT AVAILABLE
- **Vapour Density**: NOT AVAILABLE
- **Solubility (water)**: INSOLUBLE
- **Partition Coefficient**: NOT AVAILABLE
- **Autoignition Temperature**: NOT AVAILABLE
- **Decomposition Temperature**: NOT AVAILABLE
- **Viscosity**: 14.1 mm²/s @ 40°C
- **Explosive Properties**: NOT AVAILABLE
- **Oxidising Properties**: NOT AVAILABLE
- **Specific Gravity**: 0.871

**9.2 Other information**
No information provided.

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**
Carefully review all information in sections 10.2 to 10.6.

**10.2 Chemical stability**
Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**
Polymerization is not expected to occur.

**10.4 Conditions to avoid**
Avoid heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**
Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), heat and ignition sources.

**10.6 Hazardous decomposition products**
May evolve carbon oxides and hydrocarbons when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

- **Health hazard summary**: Harmful - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Chronic exposure may result in adverse effects to the central nervous system (CNS).

- **Eye**: Irritant. Contact may result in irritation, lacrimation, pain and redness. May result in burns with prolonged contact.

- **Inhalation**: Harmful - irritant. Over exposure may result in irritation of the nose and throat, coughing, nausea and headache. High level exposure may result in dizziness, drowsiness, breathing difficulties and unconsciousness. Chronic exposure may result in adverse effects to the central nervous system (CNS).

- **Skin**: Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects.

- **Ingestion**: Harmful. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, dizziness and drowsiness. Aspiration or inhalation may cause chemical pneumonitis and pulmonary oedema.

- **Toxicity data**: BUTYLATED HYDROXYTOLUENE (128-37-0)
  - LD50 (Ingestion): 650 mg/kg (mouse)
  - LD50 (Intraperitoneal): 138 mg/kg (mouse)
Product name: HYDRAUNYCOIL FH 51

LD50 (Intravenous): 180 mg/kg (mouse)
LDLo (Ingestion): 940 mg/kg (cat)
TDLo (Ingestion): 80 mg/kg (woman)

PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) (68937-41-7)
LDLo (Ingestion): 3200 uL/kg (rabbit)
LDLo (Skin): 2500 uL/kg (rabbit)

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2 Persistence and degradability
No information provided.

12.3 Bioaccumulative potential
No information provided.

12.4 Mobility in soil
No information provided.

12.5 Results of PBT and vPvB assessment
No information provided.

12.6 Other adverse effects
Aliphatic hydrocarbons behave differently in the environment depending on their size. WATER: Light aliphatics volatilise rapidly from water (half life - few hours). Bioconcentration should not be significant. SOIL: Light aliphatics biodegrade quickly in soil and water, heavy aliphatics biodegrade very slowly. ATMOSPHERE: Vapour-phase aliphatics will degrade by reaction with hydroxyl radicals.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Waste disposal
Wearing the protective equipment outlined, ensure all ignition sources are extinguished. For small quantities, absorb on paper, sand or similar and evaporate under a fume cupboard or open area. For large volumes, atomise into incinerator (mixing with more flammable solvent if required) or recycle by gravimetric separation, distilling & reusing. Contact the manufacturer/supplier for additional information (if required).

Legislation
Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Land Transport (ADG) 3082
Sea Transport (IMDG/IMO) 3082
Air Transport (IATA/ICAO) 3082

14.1 UN number 3082
14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3 Transport hazard classes

<table>
<thead>
<tr>
<th>DG Class</th>
<th>9</th>
<th>9</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidiary risk(s)</td>
<td>None Allocated</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

14.4 Packing group

| Packing group | III | III | III |

14.5 Environmental hazards

None Allocated

14.6 Special precautions for user

- Hazchem Code: 3Z
- EMS: F-A, S-F

Other information

According to special provision AU01, this product is not subject to the Australian Dangerous Good Code for transport via road and rail if in packages, IBCs other containers not exceeding 500 Kg/L.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Poison schedule
  - A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
- Classifications
  - N - Dangerous for the environment
  - Xi - Irritant
  - Xn - Harmful
- Risk phrases
  - R20: Harmful by inhalation.
  - R38: Irritating to skin.
  - R51/53: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
- Safety phrases
  - S23: Do not breathe vapour.
  - S24: Avoid contact with skin.
  - S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

Inventory listing(s)

AUSTRALIA: AICS (Australian Inventory of Chemical Substances)
All components are listed on AICS, or are exempt.

15.2 Chemical safety assessment

No information provided.

16. OTHER INFORMATION

Additional information

- RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

- WORK PRACTICES - SOLVENTS: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

- HEALTH EFFECTS FROM EXPOSURE:
  - It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

- PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
  - The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the
Product name

HYDRAUNYCOIL FH 51

availability of engineering controls should be considered before final selection of personal protective equipment is made.

COLOUR RATING SYSTEM: RMT has assigned all ChemAlert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all ChemAlert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

Abbreviations

ACGIH  American Conference of Governmental Industrial Hygienists
CAS #  Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS  Central Nervous System
EC No.  EC No - European Community Number
EMS  Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
GHS  Globally Harmonized System
GTEPG  Group Text Emergency Procedure Guide
IARC  International Agency for Research on Cancer
LC50  Lethal Concentration, 50% / Median Lethal Concentration
LD50  Lethal Dose, 50% / Median Lethal Dose
mg/m³  Milligrams per Cubic Metre
OEL  Occupational Exposure Limit
PEL  Permissible Exposure Limit
pH  relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm  Parts Per Million
REACH  Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL  Short-Term Exposure Limit
STOT-RE  Specific target organ toxicity (repeated exposure)
STOT-SE  Specific target organ toxicity (single exposure)
SUSMP  Standard for the Uniform Scheduling of Medicines and Poisons
SWA  Safe Work Australia
TLV  Threshold Limit Value
TWA  Time Weighted Average

Report Status

This ChemAlert report has been independently compiled by RMT’s scientific department utilising the original Safety Data Sheet ("SDS") for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. It is an independent collation by RMT of information obtained from the original SDS for this product. Its content has not been authorised or verified by the manufacturer / distributor of the chemical to which it relates.

This ChemAlert report does not constitute the manufacturer's original SDS and is not intended to be a replacement for same. It is provided to subscribers of ChemAlert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this ChemAlert report, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this ChemAlert report.

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End of Report