MATERIAL SAFETY DATA SHEET

SECTION 1  IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: SHELLITE

Company:  Recochem Inc.  ABN: 69 010 485 999
Address :  1809 Lytton Road, Lytton, Queensland 4178
Phone:  (07) 3308 5200 Fax: (07) 3308 5201
Emergency Telephone Number:  (07) 3308 5200 Day, After Hours 1300 131 001

Other Names:  Hydrocarbon Solvent
Manufacturer’s Product Code:  16225
Recommended Use:  Solvent, lighter fuel

SECTION 2  HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA
DANGEROUS ACCORDING TO THE CRITERIA OF THE ADG CODE

Symbols:  F Highly Flammable
Xn Harmful

Risk Phrases:  R11 Flammable
R38 Irritating to skin
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation
R 51/53 Toxic to aquatic organisms, may cause long term adverse effects on the aquatic environment
R62 Possible risk of impaired fertility
R65 Harmful: May cause lung damage if swallowed
R67 Vapours may cause drowsiness and dizziness.

Safety Phrases:  S2 Keep out of the reach of children
S9 Keep container in a well ventilated place
S16 Keep away from sources of ignition –No Smoking
S23 Do not breathe vapour
S24 Avoid contact with skin
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show container or label

SECTION 3  COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Entity</th>
<th>CAS Number</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha (petroleum), hydrotreated light</td>
<td>64742-89-8</td>
<td>100</td>
</tr>
<tr>
<td>Containing n-Hexane</td>
<td>110-54-3</td>
<td>10-30</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>202-849-4</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Product contains &lt; 0.1% benzene</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4  FIRST AID MEASURES

FIRST AID TREATMENT

Swallowed:  If swallowed, do NOT induce vomiting. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Eye:  If in eyes, hold eyes open, flood with water for at least 15 minutes. If redness, burning, blurred vision, or swelling persist transport to nearest medical facility for additional treatment.

Skin:  If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available.
Product: SHELLITE

Inhaled: Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing

First Aid facilities: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.
Advice to Doctor: Treat symptomatically.
Additional Information: None available.

SECTION 5  FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide.
Do not use water in a jet.

Hazards from combustion products: Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. Vapour is heavier than air, can spread along ground and distant ignition is possible.

Precautions for Fire Fighters and Special Protective Equipment: Wear full protective clothing and self-contained breathing apparatus.
Additional Information: Hazchem code 3[Y]E

SECTION 6  ACCIDENTAL RELEASE MEASURES

Observe all local and national regulations

Spills and Disposal: Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Remove all sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment.

Methods and Materials for Containment and Clean Up Procedures: For small spills (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.
For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7  HANDLING AND STORAGE

Precautions for Safe Handling and Storage: Avoid breathing of or contact with material. Use in well ventilated areas. Wash thoroughly after handling. Avoid contact with skin and eyes and clothing. Handle open containers in well ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains. Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands. Do not store near strong oxidants.

Dispensing: Electrostatic charges may be generated during transfer. Electrostatic discharge may cause fire. Ensure electrical continuity by earthing all equipment.

Flammability: Highly Flammable

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: In the absence of occupational exposure standards for this product, it is recommended that the following be adopted. Hexane 72mg/m³ TWA (8hr), 20ppm. X55 450mg/m³ TWA (8hr)

Biological Limit Values: No biological limit allocated

Personal Protective Equipment:

Respiratory Protection: If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter and select a filter for organic gases and vapours (boiling point > 65 Deg C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority.

Hand Protection: Use solvent resistant gloves. Nitrile for longer term protection or PVC and neoprene for incidental splashes.

Eye Protection: Wear safety Goggles.

Protective Clothing: Use chemical resistant glove/gauntlets, boots and apron. Skin protection not ordinarily required beyond standard issue work clothes.
Product: SHELLITE

**Engineering Controls:** Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists. Keep containers closed when not in use.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colourless Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Paraffinic sweet</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapour Pressure (mmHg @ 20°C):</td>
<td>Typical 34.5 kPa</td>
</tr>
<tr>
<td>Vapour Density (air = 1)</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Boiling Point (°C):</td>
<td>50-135</td>
</tr>
<tr>
<td>Freezing/Melting Point (°C):</td>
<td>Data not available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not miscible with water</td>
</tr>
<tr>
<td>Specific Gravity (g/ml @ 15°C):</td>
<td>Typical 0.67-0.755</td>
</tr>
<tr>
<td>Flashpoint (°C):</td>
<td>-30 (Abel)</td>
</tr>
<tr>
<td>Flammability Limits (%)</td>
<td>1 – 7.5</td>
</tr>
<tr>
<td>Auto Ignition Temperature (°C):</td>
<td>280 (ASTM E-659)</td>
</tr>
<tr>
<td>Percent Volatiles</td>
<td>100</td>
</tr>
</tbody>
</table>

### SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions of use.

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

**Incompatible Materials:** Strong oxidising agents.

**Hazardous Decomposition Products:** Thermal decomposition is highly dependant on conditions. A complex mixture of airborne solids, liquids, gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

### SECTION 11 TOXICOLOGICAL INFORMATION

**HEALTH EFFECTS**

**Acute:** Expected to be of low toxicity: LD50>2000mg/kg, Rat. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

**Eye:** Expected to be non-irritating to eyes.

**Skin:** Irritating to skin. Prolonged contact may cause defatting of skin which can lead to dermatitis.

**Inhaled:** Not expected to be a respiratory irritant. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

**Chronic:** Central nervous system: repeated exposure effects the nervous system. Causes foetotoxicity in animals at doses which are maternally toxic. Affects reproductive system in animals at doses which produces other toxic effects (n-Hexane)

### SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Expected Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish</td>
<td>Expected to be toxic: 1 &lt;LC/EC/IC50 &lt;=10 mg/l</td>
</tr>
<tr>
<td>Aquatic Invertebrates</td>
<td>Expected to be toxic: 1 &lt;LC/EC/IC50 &lt;=10 mg/l</td>
</tr>
<tr>
<td>Algae</td>
<td>Expected to be toxic: 1 &lt;LC/EC/IC50 &lt;=10 mg/l</td>
</tr>
<tr>
<td>Microorganisms</td>
<td>Expected to be toxic: 1 &lt;LC/EC/IC50 &lt;=10 mg/l</td>
</tr>
</tbody>
</table>

**Mobility:** Floats on water. Adsorbs on soil

**Persistence/degradability:** Readily Biodegradable. Oxidises by photo-chemical reactions in air.

**Bioaccumulation:** Has the potential to bioaccumulate

### SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal Methods:** Ensure waste disposal conforms to local waste disposal regulations.

### SECTION 14 TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN Number:</th>
<th>Proper Shipping Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1268</td>
<td>PETROLEUM DISTILLATES, N.O.S (SOLVENT NAPHTHA)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class:</th>
<th>Subsidiary Risk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>None allocated</td>
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</tbody>
</table>
Product: SHELLITE

Packing Group: II  Hazchem Code: 3[Y]E
Special Precautions for User: None

SECTION 15  REGULATORY INFORMATION
Poisons Schedule : 5
AICS : Listed

SECTION 16  OTHER INFORMATION
Further Information may be obtained by contacting Recochem on (07) 3308 5200

The information sourced for the preparation of this document was correct and complete at the time or writing to the best of the writer’s knowledge. The document represents the commitment to the company’s responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.