SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code: SU-467
Product name: DAPHNE SUPER COAT TW

Pure substance/mixture: mixture
Contains: TCODE="ECT" COMP="61789-86-4,IDE1906600", COMP="64742-47-8,IDE1907059"

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: Lubricant
Uses advised against: Not Applicable

1.3. Details of the supplier of the safety data sheet

Manufacturer:
Idemitsu Lube (Singapore) Pte. Ltd.
37, Pandan Road
Singapore, 609280
Telephone: +65-6268-5888
Fax: +65-6265-5610

Supplier:
Idemitsu Lube (Malaysia) Sdn. Bhd.
20-21, Lorong Teknologi B
Nouvelle Industrial Park
Tamas Sains Selangor 1
47800, Petaling Jaya Selangor Malaysia
Telephone: +60-3-6157-9529
Fax: +60-3-6157-9636

For further information, please contact

1.4. Emergency telephone number

Emergency Telephone
24 Hour Emergency Phone Number
+60 3 6207 4347

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

2.2. Label elements

Product identifier
Contains CALCIUM PETROLEUM SULFONATE, PETROLEUM DISTILLATES, HYDROTREATED LIGHT

SIGNAL WORD
Danger

Hazard statements
H304 - May be fatal if swallowed and enters airways
H317 - May cause an allergic skin reaction

Contains

Precautionary Statements
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P321 - Specific treatment (see supplemental first aid instructions on this label)
P363 - Wash contaminated clothing before reuse
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards
Harmful to aquatic life Combustible liquid

SECTION 3: Composition/information on ingredients

3.1 Substances
Not Applicable

3.2 Mixtures

<table>
<thead>
<tr>
<th>chemical name</th>
<th>CAS No</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES, HYDROTREATED LIGHT</td>
<td>64742-47-8</td>
<td>50 - 60</td>
</tr>
<tr>
<td>WHITE MINERAL OIL, PETROLEUM</td>
<td>8042-47-5</td>
<td>20 - 30</td>
</tr>
<tr>
<td>ESTER OIL</td>
<td>-</td>
<td>&lt;7</td>
</tr>
<tr>
<td>LUBRICATING OIL ADDITIVE</td>
<td>-</td>
<td>&lt;6</td>
</tr>
<tr>
<td>CALCIUM PETROLEUM SULFONATE</td>
<td>61789-86-4</td>
<td>&lt;1.9</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice
If symptoms persist, call a physician.

INHALATION
Move to fresh air in case of accidental inhalation of vapors or decomposition products. (Get medical attention immediately if symptoms occur.). Immediate medical attention is not required. If symptoms persist, call a physician.
Skin Contact: Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

INGESTION: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting.

Self-protection of the first aider: Use personal protective equipment as required.

4.2. Most important symptoms and effects, both acute and delayed:

Symptoms: No information available.

4.3. Indication of any immediate medical attention and special treatment needed:

Note to physicians: Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media:

Unsuitable Extinguishing Media:
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture:

Keep product and empty container away from heat and sources of ignition Risk of ignition.

5.3. Advice for firefighters:

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Personal precautions:
Use personal protective equipment as required
Remove all sources of ignition
Evacuate personnel to safe areas
Keep people away from and upwind of spill/leak
Pay attention to flashback
Take precautionary measures against static discharges

For emergency responders:
Use personal protection recommended in Section 8.

6.2. Environmental precautions:

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up:

Safety data sheet number: SU-467
Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
Soak up with inert absorbent material
Dam up
Pick up and transfer to properly labeled containers
Take precautionary measures against static discharges

6.4. Reference to other sections
See Section 12: ECOLOGICAL INFORMATION.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Use personal protective equipment as required. Avoid breathing vapors or mists. Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

General Hygiene Considerations
When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities
Storage Conditions
Store at ambient conditions. Store in accordance with local regulations. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

7.3. Specific end use(s)
Risk Management Methods (RMM)
The information required is contained in this Material Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Derived No Effect Level (DNEL) No information available
Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls
Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment
Eye/face protection
Tight sealing safety goggles.

Hand Protection
Wear protective nitrile rubber gloves.

Skin and body protection
Suitable protective clothing. Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate. Antistatic footwear. Gloves made of plastic or rubber.
Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state  liquid
Appearance  clear
Color  brown

Odor  Slight
Odor Threshold  No information available

Property  Values  Remarks • Method
pH
melting point  90 °C / 181 °F
flash point
Water solubility  Insoluble in water
Kinematic viscosity  40°C  5.039 mm²/s
Kinematic viscosity  100°C

9.2. Other information

Pour point  -47.5 °C
Dropping point
Density  @15°C  0.8453 g/cm³

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data
Sensitivity to Mechanical Impact  none.
Sensitivity to Static Discharge  No information available.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions
None under normal processing.

10.4. Conditions to avoid

Strong oxidizing agents. Heat, flames and sparks.

10.5. Incompatible materials

Strong oxidizing agents
Strong bases

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No information available.
Acute toxicity

**Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

**INHALATION**

No data available.

**Eye contact**

No data available.

**Skin Contact**

No data available.

**INGESTION**

No data available.

**Unknown Acute toxicity**

4.1% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

<table>
<thead>
<tr>
<th>chemical name</th>
<th>Acute toxicity (LD50) - Oral</th>
<th>Acute toxicity (LD50) -Dermal</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES, HYDROTREATED LIGHT</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td></td>
</tr>
<tr>
<td>WHITE MINERAL OIL, PETROLEUM</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg</td>
<td>&gt;5mg/l</td>
</tr>
<tr>
<td>CALCIUM PETROLEUM SULFONATE</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 4000 mg/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

**skin corrosion/irritation**

No end point data for material.

**Serious eye damage/eye irritation**

No end point data for material.

**Sensitization**

No end point data for material.

**Germ cell mutagenicity**

No end point data for material.

**Carcinogenicity**

The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, hydrotreating, and dewaxing to remove aromatics and improve performance characteristics. All of the oils meet the IP-346 criteria of less than 3 percent PAHs and therefore none are listed as a carcinogen by NTP, IARC, or OSHA.

**Reproductive toxicity**

No end point data for material.

**STOT - single exposure**

No end point data for material.

**STOT - repeated exposure**

No end point data for material.

**Aspiration hazard**

May be fatal if swallowed and enters airways.

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**SECTION 12: Ecological information**

**12.1. Toxicity**

Harmful to aquatic life

4.3% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES, HYDROTREATED LIGHT</td>
<td></td>
<td>45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrhoricus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>4720: 96 h Den-dronereides heteropoda mg/L LC50</td>
</tr>
<tr>
<td>WHITE MINERAL OIL, PETROLEUM</td>
<td>LOEL(algae)&gt;=100mg/l(WAF)</td>
<td>10000: 96 h Lepomis macrhoricus mg/L LC50</td>
<td>EL50&gt;100mg/l(WAF)</td>
</tr>
</tbody>
</table>
### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

<table>
<thead>
<tr>
<th>chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>PETROLEUM DISTILLATES, HYDROTREATED LIGHT</td>
<td>&gt;6</td>
</tr>
<tr>
<td>WHITE MINERAL OIL, PETROLEUM</td>
<td>&gt;6</td>
</tr>
</tbody>
</table>

### 12.4. Mobility in soil

No information available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- **Waste from Residues / Unused Products**: Disposal should be in accordance with applicable regional, national and local laws and regulations.
- **Contaminated packaging**: Improper disposal or reuse of this container may be dangerous and illegal.

### SECTION 14: Transport information

**IMDG**

| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 Marine pollutant | Not Applicable |
| 14.6 Special Provisions | none |

**RID**

| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 environmental hazard | Not Applicable |
| 14.6 Special Provisions | none |

**ADR**

| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
| 14.4 Packing Group | Not regulated |
| 14.5 environmental hazard | Not Applicable |
| 14.6 Special Provisions | none |

**IATA**

| 14.1 UN/ID no | Not regulated |
| 14.2 Proper shipping name | Not regulated |
| 14.3 Hazard Class | Not regulated |
14.4 Packing Group  Not regulated
14.5 environmental hazard  Not Applicable
14.6 Special Provisions  none

ADN
14.1 UN/ID no  Not regulated
14.2 Proper shipping name  Not regulated
14.3 Hazard Class  Not regulated
14.4 Packing Group  Not regulated
14.5 environmental hazard  Not Applicable
14.6 Special Provisions  none

IBC
Transport in bulk according to Annex II of MARPOL 73/78 and Not regulated
the IBC Code
Proper shipping name  Not regulated
CATEGORY  Not regulated

SECTION 15: Regulatory information

National Regulations
Occupational Safety and Health Act  Applicable
Factories and Machinery Act  Applicable
Environment Quality Act  Not Applicable
Pesticides Act  Not Applicable
Environmentally Hazardous Substances(EHS) Notification and Registration  Applicable
Poisons Act  Not Applicable
Food Act  Not Applicable

International Inventories
ENCS  Complies
TSCA  Complies
EINECS/ELINCS  Complies
DSL  Complies
AICS  Complies
KECL  Complies
PICCS  Not Listed
China (IECSC)  Complies
Taiwan  Complies

SECTION 16: Other information

Issue Date  19-Mar-2014
Revision date  26-Jan-2015
Revision Note  Not Applicable.

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet