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

1.1. Product identifier

Product Code
SU-561

Product name
DAPHNE OIL COAT RL-55

Pure substance/mixture
mixture

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

Aspiration toxicity
Category 1

Chronic aquatic toxicity
Category 3

2.2. Label elements

Product identifier
Contains PETROLEUM DISTILLATES, HYDROTREATED LIGHT, Benzenesulfonic acid, di-C10-18-alkyl derivs., barium salts

SIGNAL WORD
Danger
Hazard statements
H412 - Harmful to aquatic life with long lasting effects
H304 - May be fatal if swallowed and enters airways

Contains

Precautionary Statements
P273 - Avoid release to the environment
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 Harmful to aquatic life with long lasting effects

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>70 - 80</td>
</tr>
<tr>
<td>WHITE MINERAL OIL, PETROLEUM</td>
<td>8042-47-5</td>
<td>10 - 20</td>
</tr>
<tr>
<td>LUBRICATING OIL ADDITIVE</td>
<td></td>
<td>&lt;10</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

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 | characteristic |
| Odor Threshold | No information available |

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>melting point</td>
<td>88 °C / 176 °F</td>
<td></td>
</tr>
<tr>
<td>flash point</td>
<td>Insoluble in water</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Cleveland Open Cup</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity 40°C</td>
<td>2.607 mm2/s</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity 100°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Safety data sheet number: SU-561
9.2. Other information
Pour point  
-45.0 °C
Dropping point
Density @15°C  
0.8140 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 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

Acute toxicity

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

<table>
<thead>
<tr>
<th>Mode</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INHALATION</td>
<td>No data available.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>No data available.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>No data available.</td>
</tr>
<tr>
<td>INGESTION</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

Unknown Acute toxicity
6.6% 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) - Dermall</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>
</tbody>
</table>
WHITE MINERAL OIL, PETROLEUM | > 5000 mg/kg (Rat) | >2000 mg/kg | >5 mg/l

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 | Risk of serious damage to the lungs (by aspiration).

**SECTION 12: Ecological information**

12.1. Toxicity

8.3% of the mixture consists of components(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 macrochirus 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 macrochirus 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 the IBC Code
Proper shipping name Not regulated
CATEGORY Not regulated

SECTION 15: Regulatory information

National Regulations
Occupational Safety and Health Act Applicable
Section 16: Other Information

Issue Date 01-Dec-2014
Revision date 10-Apr-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