RELIACUT DH 5 is a chlorine-free anti-mist type cutting fluid blended with the new unique inactive sulfurized extreme-pressure agents and newly developed friction modifiers. The processing performance of RELIACUT DH 5 has been improved, since it is formulated with an increased amount of fatty and sulfur than RELIACUT DS 5. RELIACUT DH 5 is suitable for processing requiring processing performance together with cooling performance and permeability (cleanliness), and general cutting and grinding processing. RELIACUT DH 5 is the ideal oil for many metalworking applications of wide range of materials such as non-ferrous metals (copper materials), steel materials and alloy steel. RELIACUT DH 5 corresponds to JIS K 2241 Type N3, No.6.

- **Special Features**

  1. **Excellent Cutting and Grinding Performance**

      Because RELIACUT DH 5 is blended with highly refined low viscosity base oils, inactive sulfurized extreme-pressure agents and special friction modifiers, it provides improved finished surface roughness and longer tool life in the general machining of ferric metals.

  2. **Excellent Anti-mist Performance**

      RELIACUT DH 5 contains special mist prevention agents that reduce the amount of oil mist formed during machining. The result is an improved working environment.

  3. **Low odor**

      Since the additives of RELIACUT DH 5 are low odor, the work environment is improved.

  4. **Contribution to the viewing of the processing point**

      RELIACUT DH 5 can enable to watch the processing point easily because of the reduced floating mist and light oil color.

  5. **Superior in economy**

      RELIACUT DH 5 is superior in economy because it can reduce oil consumption which is removed by attaching on the work piece and cutting powder due to its low viscosity.

- **Applications**

  Cutting work (such as fine hole drilling) and honing machining requiring machining accuracy and permeability of steel materials including nonferrous metals, carbon steel and alloy steel.

- **Containers**

  200-liter drums and 20-liter cans

- **Typical Properties of RELIACUT DH 5**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>yellow</td>
</tr>
<tr>
<td>Color(ASTM)</td>
<td>L.2.5</td>
</tr>
<tr>
<td>Density g/cm³</td>
<td>0.854</td>
</tr>
<tr>
<td>Kinematic viscosity(40°C) mm²/s</td>
<td>5.17</td>
</tr>
<tr>
<td>Kinematic viscosity(100°C) mm²/s</td>
<td>1.89</td>
</tr>
<tr>
<td>Flash point(COC) °C</td>
<td>122</td>
</tr>
<tr>
<td>Pour point °C</td>
<td>-42.5</td>
</tr>
<tr>
<td>Acid number mgKOH/g</td>
<td>1.85</td>
</tr>
<tr>
<td>Copper corrosion(100°C, 1h)</td>
<td>1</td>
</tr>
<tr>
<td>Fatty content mass%</td>
<td>15</td>
</tr>
<tr>
<td>Sulfur content mass%</td>
<td>1.62</td>
</tr>
</tbody>
</table>

*Note: The typical properties may be changed without notice. (February 2012)*
## Handling Precautions

Follow these precautions when handling this product.

<table>
<thead>
<tr>
<th>Composition :</th>
<th>Base Oil, Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautionary pictograms:</td>
<td>![pictogram1] ![pictogram2]</td>
</tr>
<tr>
<td>Signal word:</td>
<td>Danger</td>
</tr>
<tr>
<td>Hazard Statement:</td>
<td>Combustible liquid Causes serious eye irritation May be fatal if swallowed and enters airways</td>
</tr>
</tbody>
</table>
| Precautionary Statements: | • Do not handle until all safety precautions have been read and understood.  
• Wear protective gloves/protective clothing/eye protection/face protection.  
• Do not allow the eyes to become exposed to the product. Do not swallow the product.  
• Keep away from heat/sparks/open flames/hot surfaces – No smoking.  
• Use explosion-proof electrical/ventilating/lighting/equipment.  
• Ground/bond container and receiving equipment.  
• Wash hands thoroughly after handling.  
• Do not eat, drink or smoke when using this product. |
| Response | • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.  
• IF ON SKIN: Wash with plenty of soap and water.  
• IF IN EYES: Rinse continuously with water for several minutes.  
• Remove contact lenses if present and easy to do. Continue rinsing.  
• Do NOT induce vomiting.  
• In case of fire: Use suitable extinguishing media for extinction. |
| Storage | • The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.  
• Containers that have been opened must be tightly sealed.  
• Store locked up. |
| Disposal | • Dispose of contents/container in accordance with local/regional/national/international regulations.  
• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage. |