Shell Air Tool S2 A 100

Pneumatic Tool and Rock Drill Oils

Shell Air Tool S2 A has been developed to meet the special lubrication requirements of pneumatic tools, including percussion type pneumatic tools subjected to the most arduous conditions. They are designed to maintain high oil film strength and effectively lubricate even the most demanding requirements of pneumatic drill impact mechanisms as well as providing excellent mist lubrication of general purpose air tools.

Performance, Features & Benefits

- **Reliable wear & corrosion protection**
  
  Shell Air Tool Oil S2 A has been developed to provide excellent lubricity and anti-wear properties to protect percussion tools including rock drills operating under arduous conditions.

- **Maintaining system efficiency**

  To ensure efficient lubrication under the full range of operation, Shell Air Tool Oil S2 A has good low temperature fluidity at low temperatures to provide consistent lubrication and to resist oil build-up in areas cooled by rapid air expansion.

  Shell Air Tool Oil S2 A has excellent emulsability enabling lubrication in a wet environment.

Main Applications

- **Percussive pneumatic tools**
  
  Suitable for a wide range of mobile percussive pneumatic tools such as those used in rock drilling, mining and construction activities (e.g. jack hammers, sinkers and other air operated tools).

- **Oil mist lubrication applications**

  Shell Air Tool Oil can also be used in applications requiring mist lubrication, such as air Tool installations commonly found in manufacturing.

- **Other applications**

  May be used in certain gear and bearing lubrication systems subject to water ingress.

Specifications, Approvals & Recommendations

- **ISO 6743-11 Types PAC and PBC**

  For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Compatibility & Miscibility

- **Seal & Paint Compatibility**

  Shell Air Tool Oil S2 A is compatible with seal materials and paints normally specified for use with mineral oils.
**Typical Physical Characteristics**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Method</th>
<th>Air Tool S2 A 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO Viscosity Grade</td>
<td>ISO 3448</td>
<td>100</td>
</tr>
<tr>
<td>Kinematic Viscosity @40°C</td>
<td>ISO 3104</td>
<td>100</td>
</tr>
<tr>
<td>Kinematic Viscosity @100°C</td>
<td>ISO 3104</td>
<td>11.5</td>
</tr>
<tr>
<td>Viscosity Index</td>
<td>ISO 2909</td>
<td>102</td>
</tr>
<tr>
<td>Flash Point</td>
<td>ISO 2592 (COC)</td>
<td>241</td>
</tr>
<tr>
<td>Pour Point</td>
<td>ISO 3016</td>
<td>-24</td>
</tr>
<tr>
<td>Density</td>
<td>ISO 12185</td>
<td>884</td>
</tr>
</tbody>
</table>

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

**Heath, Safety & Environment**

- **Health and Safety**
  
  Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from http://www.epc.shell.com

- **Protect the Environment**
  
  Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

**Additional Information**

- **Advice**
  
  Advice on applications not covered here may be obtained from your Shell representative.