SERVO ULTRA

GRADES AVAILABLE - SERVO ULTRA 10W, 20, 30, 40, 50

DESCRIPTION
Servo Ultra oils are heavy duty diesel engine oils, and are blended from highly refined, high
viscosity index base stocks and contain appropriate dosages of detergent-dispersant and
antioxidant additives to meet the stated performance standards.

PERFORMANCE BENEFITS
Servo Ultra oils
- Effectively combat the deleterious products of combustion associated with high sulphur fuels, thus minimising deposits and wear.
- Maintain excellent engine cleanliness.
- Minimise deposits resulting from high output, low speed, low temperature operations.
- Provide excellent control of cold sludge and corrosive wear.
- Possess excellent oxidation stability ensuring long service life especially in transmission systems.

APPLICATION
Servo Ultra oils are recommended for all classes of supercharged diesel engines of high speed, high output such as those in:
- Heavy duty diesel vehicles / Tractors
- Earth moving / Off-highway equipment
- Transmission systems of Caterpillar equipment
- Large generating sets
Servo Ultra 10 meets the requirements of hydraulic fluid Type C2 specification of Detroit Diesel Allison, Division of General Motors Corporation, USA.

PERFORMANCE STANDARDS
Servo Ultra oils meet the following specifications:
- API CD
- US MIL-L-45199B
- Caterpillar Series 3
- E-DL 2 of IS:13656-2002 specifications
Servo Ultra oils are approved by the leading manufactures including
- Bharat Earth Movers Ltd., Bangalore
- Escorts Ltd., Faridabad

CHARACTERISTICS

<table>
<thead>
<tr>
<th>SAE GRADE</th>
<th>10W</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinematic Viscosity cSt @ 100°C</td>
<td>5Min.</td>
<td>6 – 8</td>
<td>10 – 12</td>
<td>13 – 15</td>
<td>18 – 20</td>
</tr>
<tr>
<td>Viscosity Index, Min.</td>
<td>100</td>
<td>95</td>
<td>95</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Flash point (COC), °C Min.</td>
<td>200</td>
<td>200</td>
<td>220</td>
<td>225</td>
<td>230</td>
</tr>
<tr>
<td>Pour Point, °C Max.</td>
<td>(-) 27</td>
<td>(-) 6</td>
<td>(-) 6</td>
<td>(-) 6</td>
<td>(-) 6</td>
</tr>
<tr>
<td>TBN mg KOH/gm</td>
<td>9.5 – 11.5</td>
<td>9.5 – 11.5</td>
<td>9.5 – 11.5</td>
<td>9.5 – 11.5</td>
<td>9.5 – 11.5</td>
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</tbody>
</table>

HEALTH & SAFETY
These oils are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.

For further information please contact our nearest office OR:
Technical Services Dept., Indian Oil Corporation Ltd., G-9, Ali Yavar Jung Marg, Bandra (E), Mumbai–400 051
E-Mail: tservices@indianoil.co.in OR tech_services@indianoil.co.in