Since 2007, US Global Petroleum (USGP) has been producing lubricants that have continually met or exceed accepted industry standards. The USGP line of products reflects awareness of the changing conditions and needs of the automotive market. USGP lubricants are made from high quality base stocks and additives that are blended under the controlled formulation of USGP chemists and engineers, and are offered at competitive prices. USGP serves a wide variety of customers, and we are an EPA established facility with API certified products.
Benefits and Applications

- API Service Classification SN, SM, SL, SJ
- ILSAC GF-5 Service Certification (SAE Grades 5W-20, 5W-30 and 10W-30)
- Lower pour point reduces start-up wear during cold weather
- Full synthetic oil helps to improve fuel economy
- Compatible with conventional oils
- Excellent wear, corrosion, and rust protection
- Superior resistance to sludge and varnish deposit formation
- Designed with premium base stocks for added thermal breakdown resistance

Typical Characteristics - Full Synthetic - V140212

<table>
<thead>
<tr>
<th>SAE GRADE</th>
<th>0W-20</th>
<th>0W-30</th>
<th>0W-40</th>
<th>5W-20</th>
<th>5W-30</th>
<th>5W-40</th>
<th>10W-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>API SERVICE</td>
<td>SN/GF-5</td>
<td>SN/GF-5</td>
<td>SN</td>
<td>SN</td>
<td>SN/GF-5</td>
<td>SN</td>
<td>SN/GF-5</td>
</tr>
<tr>
<td>API Gravity</td>
<td>ASTM D287</td>
<td>35.8</td>
<td>35.6</td>
<td>35.0</td>
<td>35.0</td>
<td>34.9</td>
<td>35.0</td>
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<tr>
<td>Flash Point, °C/°F</td>
<td>ASTM D92</td>
<td>210/410</td>
<td>198/394</td>
<td>208/406</td>
<td>204/399</td>
<td>205/401</td>
<td>204/399</td>
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<tr>
<td>Pour Point, °C/°F</td>
<td>ASTM D97</td>
<td>-5/5.9</td>
<td>-50/-58</td>
<td>-48/-54.4</td>
<td>-48/-54.4</td>
<td>-38/-56.4</td>
<td>-48/-45.6</td>
</tr>
<tr>
<td>Viscosity @ 40°C, cSt</td>
<td>ASTM D445</td>
<td>46.3</td>
<td>60.5</td>
<td>86.2</td>
<td>48.7</td>
<td>62.7</td>
<td>84.0</td>
</tr>
<tr>
<td>Viscosity @ 100°C, cSt</td>
<td>ASTM D445</td>
<td>8.7</td>
<td>16.9</td>
<td>15.1</td>
<td>8.6</td>
<td>10.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Viscosity Index</td>
<td>ASTM D2270</td>
<td>169</td>
<td>175</td>
<td>185</td>
<td>157</td>
<td>164</td>
<td>145</td>
</tr>
<tr>
<td>CCS, mPa-s,°C max</td>
<td>ASTM D5293</td>
<td>6200 @ -35</td>
<td>6200 @ -35</td>
<td>6200 @ -35</td>
<td>6200 @ -30</td>
<td>6200 @ -30</td>
<td>6200 @ -30</td>
</tr>
<tr>
<td>Phosphorus, wt% max</td>
<td>ASTM D4951</td>
<td>0.08</td>
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<td>Total Base No. TBN</td>
<td>ASTM D2896</td>
<td>7.9</td>
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<td>7.9</td>
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</tr>
</tbody>
</table>

Test Method ASTM - Typical test data are average values only. Minor variations, which do not affect performance, may occur.

HANDLING AND SAFETY INFORMATION - Refer to USGLOBAL (MSDS) Material Safety Data Sheets for proper handling and safety information. Use the same care and handling as for any petroleum product. Nothing herein shall be deemed to constitute a warranty, express or implied, that said information or data are correct or that the products described are merchantable or fit for a particular purpose, or that said information, data or products can be used without infringing patents of third parties.
0W-20 Full Synthetic

Measure of reserve additives available to neutralize harmful acids

<table>
<thead>
<tr>
<th>Brand</th>
<th>TBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennzoil</td>
<td>9</td>
</tr>
<tr>
<td>Red Line</td>
<td>8.8</td>
</tr>
<tr>
<td>Amsoil</td>
<td>12.6</td>
</tr>
<tr>
<td>Everest</td>
<td>7.9</td>
</tr>
</tbody>
</table>
0W-20 Full Synthetic

API Range is 5.6 to 9.3
0W-20 Full Synthetic

Viscosity @ 40°C

Pennzoil: 46.8
Red Line: 48
Amsoil: 46.7
Everest: 46.29
**Viscosity INDEX**

**0W-20 Full Synthetic**

Measure of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.

<table>
<thead>
<tr>
<th></th>
<th>Pennzoil</th>
<th>Red Line</th>
<th>Amsoil</th>
<th>Everest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>164</td>
<td>172</td>
<td>170</td>
<td>169</td>
</tr>
</tbody>
</table>
0W-20 Full Synthetic

Apparent viscosity @ -35° C
A lower number will provide a better cold cranking performance

Pennzoil: 5720
Red Line: 5500
Amsoil: 4979
Everest: 5850

API Maximum is 6200
Evaporative Loss

OW-20 Full Synthetic

A lower number results in less evaporation of oil

Pennzoil: 8.9
Red Line: 9
Amsoil: 9.3
Everest: 9

API Maximum is 15
0W-40 Full Synthetic

Measure of reserve additives available to neutralize harmful acids

- Pennzoil: 9
- Red Line: 9.5
- Amsoil: 10.5
- Everest: 7.9
Viscosity @ 100°C

0W-40 Full Synthetic

Pennzoil: 13.6
Red Line: 15.4
Amsoil: 14.7
Everest: 15.07

API Range is 12.5 to 16.3
0W-40 Full Synthetic

Viscosity @ 40°C

- Pennzoil: 75.2
- Red Line: 86
- Amsoil: 83.7
- Everest: 86.18
0W-40 Full Synthetic

Measure of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.
0W-40 Full Synthetic

Apparent viscosity @ -35°C

A lower number will provide a better cold cranking performance

Pennzoil: 5800
Red Line: 5700
Amsoil: 6139
Everest: 5850

API Maximum is 6200
0W-40 Full Synthetic

A lower number results in less evaporation of oil

Pennzoil | Red Line | Amsoil | Everest
---|---|---|---
10 | 9 | 7.3 | 9

API Maximum is 15
5W-20 Full Synthetic

Measure of reserve additives available to neutralize harmful acids

- Pennzoil: 9
- Red Line: 8.8
- Amsoil: 12.6
- Everest: 7.9
5W-20 Full Synthetic

Pennzoil 8.4
Red Line 9
Amsoil 8.7
Everest 8.6

API Range is 5.6 to 9.3
5W-20 Full Synthetic

- Pennzoil: 47.43
- Red Line: 53
- Amsoil: 50.2
- Everest: 48.68
5W-20 Full Synthetic

Measure of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.
5W-20 Full Synthetic

Apparent viscosity @ -35° C
A lower number will provide a better cold cranking performance

5720  6000  4879  5850
Pennzoil  Red Line  Amsoil  Everest

API Maximum is 6600
5W-20 Full Synthetic

A lower number results in less evaporation of oil

Pennzoil: 8.9  
Red Line: 8  
Amsoil: 9.3  
Everest: 9

API Maximum is 15
5W-30 Full Synthetic

Measure of reserve additives available to neutralize harmful acids

- **Pennzoil**: 9
- **Red Line**: 8.8
- **Amsoil**: 12.6
- **Everest**: 7.9
5W-30 Full Synthetic

- Pennzoil: 10.3
- Red Line: 11.9
- Amsoil: 10.5
- Everest: 10.8

API Range is 9.3 to 12.5
5W-30 Full Synthetic

Viscosity @ 40°C

- Pennzoil: 58.9
- Red Line: 71
- Amsoil: 60.1
- Everest: 62.72
5W-30 Full Synthetic

Measure of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.

- Pennzoil: 165
- Red Line: 166
- Amsoil: 166
- Everest: 164
5W-30 Full Synthetic

Apparent viscosity @ -35° C
A lower number will provide a better cold cranking performance

Pennzoil: 4000
Red Line: 6000
Amsoil: 4426
Everest: 5850

API Maximum is 6600
5W-30 Full Synthetic

A lower number results in less evaporation of oil

API Maximum is 15
5W-40 Full Synthetic

Measure of reserve additives available to neutralize harmful acids
5W-40 Full Synthetic

Viscosity @ 100°C

API Range is 12.5 to 16.3
5W-40 Full Synthetic

- Pennzoil: 80.7
- Red Line: 97
- Amsoil: 83.3
- Everest: 84
5W-40 Full Synthetic

Measures of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.

- Pennzoil: 171
- Red Line: 174
- Amsoil: 168
- Everest: 145

API Range is 156 to 159
5W-40 Full Synthetic

Apparent viscosity @ -35° C
A lower number will provide a better cold cranking performance

Pennzoil: 6200
Red Line: 5800
Amsoil: 5433
Everest: 5850
5W-40 Full Synthetic

A lower number results in less evaporation of oil

<table>
<thead>
<tr>
<th>Product</th>
<th>Evaporative Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennzoil</td>
<td>6.8</td>
</tr>
<tr>
<td>Red Line</td>
<td>6</td>
</tr>
<tr>
<td>Amsoil</td>
<td>8.7</td>
</tr>
<tr>
<td>Everest</td>
<td>9</td>
</tr>
</tbody>
</table>

API Maximum is 15
10W-30 Full Synthetic

Measure of reserve additives available to neutralize harmful acids

Pennzoil: 9
Red Line: 8.8
Amsoil: 12.6
Everest: 7.9
10W-30 Full Synthetic

Viscosity @ 100°C

Pennzoil: 10.5
Red Line: 11.4
Amsoil: 10.5
Everest: 10.51

API Range is 9.3 to 12.5
10W-30 Full Synthetic

- Pennzoil: 66.2
- Red Line: 70
- Amsoil: 62.5
- Everest: 67.3
Measure of oil's ability to maintain viscosity over a large temperature range. A higher number will result in a lower variability of viscosity at all operating temperatures.
10W-30 Full Synthetic

Apparent viscosity @ -35° C
A lower number will provide a better cold cranking performance

Pennzoil  Red Line  Amsoil  Everest

4200  5000  3646  5850

API Maximum is 7000
10W-30 Full Synthetic

A lower number results in less evaporation of oil

Pennzoil: 4.8
Red Line: 6
Amsoil: 5.3
Everest: 9

API Maximum is 15