Since 2007, US Global Petroleum (USGP) has been producing lubricants that have continually met or exceeded 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.

www.usglobalpetroleum.com
**Benefits and Applications**

- API Service Classification SN, SM, SL, SJ
- ILSAC GF-5 Service Classification (5W-20, 5W-30 and 10W-30)
- Lower pour point reduces start-up wear during cold weather
- Synthetic blend 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 - Synthetic Blend - V140212**

<table>
<thead>
<tr>
<th>SAE GRADE</th>
<th>5W-20</th>
<th>5W-30</th>
<th>5W-40</th>
<th>10W-30</th>
<th>10W-40</th>
<th>20W-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>API SERVICE</td>
<td>SN/GF-5</td>
<td>SN/GF-5</td>
<td>SN</td>
<td>SN/GF-5</td>
<td>SN</td>
<td>SN</td>
</tr>
<tr>
<td>API Gravity</td>
<td>ASTM D2887</td>
<td>32.5</td>
<td>32.5</td>
<td>35.0</td>
<td>31.6</td>
<td>30.9</td>
</tr>
<tr>
<td>Flash Point, COC °C/°F</td>
<td>ASTM D92</td>
<td>202/395.6</td>
<td>210/410</td>
<td>205/401</td>
<td>206/402.8</td>
<td>206/402.8</td>
</tr>
<tr>
<td>Pour Point, °C/°F</td>
<td>ASTM D97</td>
<td>-48/-54.4</td>
<td>-45/-49</td>
<td>-38/-36.4</td>
<td>-40/-40</td>
<td>-40/-40</td>
</tr>
<tr>
<td>Viscosity @ 40°C, cSt</td>
<td>ASTM D445</td>
<td>50.2</td>
<td>64.6</td>
<td>84.0</td>
<td>70.0</td>
<td>110.0</td>
</tr>
<tr>
<td>Viscosity @ 100°C, cSt</td>
<td>ASTM D445</td>
<td>8.7</td>
<td>10.8</td>
<td>15.0</td>
<td>10.7</td>
<td>15.9</td>
</tr>
<tr>
<td>Viscosity Index</td>
<td>ASTM D2270</td>
<td>151</td>
<td>159</td>
<td>145</td>
<td>138</td>
<td>154</td>
</tr>
<tr>
<td>CCS, mPa-sec °C max</td>
<td>ASTM D5293</td>
<td>6600 @ -30</td>
<td>6600 @ -30</td>
<td>6200 @ -30</td>
<td>7000 @ -25</td>
<td>7000 @ -25</td>
</tr>
<tr>
<td>Phosphorus, Wt% max</td>
<td>ASTM D4951</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>Total Base No. TBN</td>
<td>ASTM D2896</td>
<td>7.9</td>
<td>7.9</td>
<td>7.9</td>
<td>7.9</td>
<td>7.9</td>
</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.
5W-20 SN/GF-5

Measure of reserve additives available to neutralize harmful acids

- Pennzoil: 9.46
- Castrol GTX: 7.73
- Peak: 7.09
- Quaker State: 7.87
- Valvoline: 6.86
- Everest: 7.9

TBN, mg KOH/g, (ASTM D2896)
Viscosity @ 100°C

5W-20 SN/GF-5

API Range is 5.6 to 9.3
Viscosity @ 40°C

5W-20 SN/GF-5

- Pennzoil: 49.43
- Castrol GTX: 53.53
- Peak: 46.34
- Quaker State: 47.95
- Valvoline: 49.42
- Everest: 50.21
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 SN/GF-5

Apparent viscosity @ -30° C
A lower number will provide a better cold cranking performance

Pennzoil: 4389
Castrol GTX: 5136
Peak: 5618
Quaker State: 4017
Valvoline: 5288
Everest: 5800

API Maximum is 6600
5W-20 SN/GF-5

A lower number results in less evaporation of oil

API Maximum is 15