Esterex™ A51
Synthetic Fluid

Product Description
Esterex™ Adipate Esters are API category Group V fluids. These esters have excellent low-temperature properties, high viscosity indices, good lubricating properties and low volatilities. Esterex™ Adipate Esters can be used as sole base stocks or blendstocks with other synthetic fluids in many automotive and industrial lubricant applications. These esters are ideal in high-temperature conditions, such as reciprocating air compressors, where discharge valve cleanliness is required.

General

Availability
- Asia Pacific
- Central America
- North America
- South America

Basics
- Specific Gravity (60.1°F (15.6°C))
  Typical Value (English) 0.915
  Typical Value (SI) 0.915
  Test Based On ASTM D4052
- Appearance
  Bright & Clear
- Color
  < 0.5
- Kinematic Viscosity
  212°F (100°C) 5.4 cSt
  104°F (40°C) 27.0 cSt
  -40°F (-40°C) 16970 cSt
- Viscosity Index
  136
- Pour Point
  -71 °F
- Flash Point, COC
  477 °F
- Noack Volatility
  7.4 wt%
- Water
  < 350 ppm
- Refractive Index
  1.4559
- Total Acid Number
  0.02 mg KOH/g
- Hydrolytic Stability, TAN Change
  0.16 mg KOH/g

Thermal
- Density Correction Factor
  0.000702
- Fire Point, COC
  536 °F
- Flash Point, PMCC
  405 °F
- Evaporation Loss
  10.1 wt%

Performance
- RPVOT
  Neat 265 min
  With AO > 1210 min
- Biodegradation
  58.5 %

Solubility
- Aniline Point
  < 68.0 °F
- Kauri-Butanol Value
  29.0

Typical properties: these are not to be construed as specifications.

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**Elastomer Compatability, Fluoroeelastomer**

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Based On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Change</td>
<td>3.4 %</td>
<td>3.4 %</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>Hardness Change</td>
<td>-2</td>
<td>-2</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>Tensile Strength Change</td>
<td>-3.1 %</td>
<td>-3.1 %</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>Elongation Change</td>
<td>-9.1 %</td>
<td>-9.1 %</td>
<td>ASTM D471</td>
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</tbody>
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**Elastomer Compatability, Nitrile**

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Based On</th>
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</thead>
<tbody>
<tr>
<td>Volume Change</td>
<td>12.0 %</td>
<td>12.0 %</td>
<td>ASTM D471</td>
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<tr>
<td>Hardness Change</td>
<td>-8</td>
<td>-8</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>Tensile Strength Change</td>
<td>-32.0 %</td>
<td>-32.0 %</td>
<td>ASTM D471</td>
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<tr>
<td>Elongation Change</td>
<td>-20.9 %</td>
<td>-20.9 %</td>
<td>ASTM D471</td>
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**Elastomer Compatability, Polyacrylate**

<table>
<thead>
<tr>
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<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
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<td>Volume Change</td>
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<td>Hardness Change</td>
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<td>-8</td>
<td>ASTM D471</td>
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<tr>
<td>Tensile Strength Change</td>
<td>-19.9 %</td>
<td>-19.9 %</td>
<td>ASTM D471</td>
</tr>
<tr>
<td>Elongation Change</td>
<td>-12.0 %</td>
<td>-12.0 %</td>
<td>ASTM D471</td>
</tr>
</tbody>
</table>

**Legal Statement**

For detailed Product Stewardship information, please contact Customer Service.

**Notes**

1. Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

2. Single sample or two sample average determinations

3. Single sample or two sample average determinations 1 wt.% diphenylamines and phenyl naphthylamine antioxidant (AO) added

For additional technical, sales and order assistance:

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