

# Esterex™ A34

## 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 basestocks 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 <sup>1</sup>	<ul style="list-style-type: none"> <li>▪ Africa &amp; Middle East</li> <li>▪ Asia Pacific</li> </ul>	<ul style="list-style-type: none"> <li>▪ Europe</li> <li>▪ Latin America</li> </ul>	<ul style="list-style-type: none"> <li>▪ North America</li> </ul>
Revision Date	▪ 11/16/2005		

Basics	Typical Value (English)	Typical Value (SI)	Test Based On
Specific Gravity (68°F (20°C))	0.922	0.922	BRCP 4843
Appearance	Clear and Free	Clear and Free	Visual
Color	< 0.5	< 0.5	ASTM D1500
Kinematic Viscosity			ASTM D445
212°F (100°C)	3.2 cSt	3.2 mm <sup>2</sup> /s	
104°F (40°C)	12.0 cSt	12.0 mm <sup>2</sup> /s	
-40°F (-40°C) <sup>2</sup>	1970 cSt	1970 mm <sup>2</sup> /s	
Viscosity Index	137	137	ASTM D2270
Pour Point	-76 °F	-60 °C	ASTM D5950/D97
Flash Point, COC	390 °F	199 °C	ASTM D92
Noack Volatility	20.4 wt%	20.4 wt%	ASTM D5800/DIN 51581
Water	< 1000 ppm	< 1000 ppm	ASTM D6304
Refractive Index <sup>2</sup> (77°F (25°C))	1.4487	1.4487	ASTM D1218
Total Acid Number	< 0.08 mg KOH/g	< 0.08 mg KOH/g	BRCP 4625
Hydrolytic Stability, TAN Change <sup>2</sup>	0.11 mg KOH/g	0.11 mg KOH/g	ASTM D2619

Thermal	Typical Value (English)	Typical Value (SI)	Test Based On
Density Correction Factor <sup>2</sup>	7.33E-4 (g/cm <sup>3</sup> )/°C	7.33E-4 (g/cm <sup>3</sup> )/°C	ASTM D1250
Fire Point, COC <sup>2</sup>	478 °F	248 °C	ASTM D92
Flash Point, PMCC <sup>2</sup>	338 °F	170 °C	ASTM D93
Evaporation Loss <sup>2</sup> (401°F (205°C), 6.5 hr)	37.0 wt%	37.0 wt%	ASTM D972 (mod)

Performance	Typical Value (English)	Typical Value (SI)	Test Based On
RPVOT <sup>3</sup> (With AO)	> 1210 min	> 1210 min	ASTM D2272
Biodegradation <sup>2</sup>	78.5 %	78.5 %	OECD 301F

Solubility	Typical Value (English)	Typical Value (SI)	Test Based On
Aniline Point <sup>2</sup>	14.4 °F	-9.8 °C	ASTM D611
Kauri-Butanol Value <sup>2</sup>	84.5	84.5	ASTM D1133

Elastomer Compatibility, Fluoroelastomer	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Change <sup>2</sup>	8.6 %	8.6 %	ASTM D471
Hardness Change <sup>2</sup>	-7	-7	ASTM D471
Tensile Strength Change <sup>2</sup>	-22.0 %	-22.0 %	ASTM D471
Elongation Change <sup>2</sup>	-2.4 %	-2.4 %	ASTM D471

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Elastomer Compatibility, Nitrile	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Change <sup>2</sup>	17.2 %	17.2 %	ASTM D471
Hardness Change <sup>2</sup>	-16	-16	ASTM D471
Tensile Strength Change <sup>2</sup>	-14.9 %	-14.9 %	ASTM D471
Elongation Change <sup>2</sup>	-30.9 %	-30.9 %	ASTM D471

Elastomer Compatibility, Polyacrylate	Typical Value (English)	Typical Value (SI)	Test Based On
Volume Change <sup>2</sup>	42.1 %	42.1 %	ASTM D471
Hardness Change <sup>2</sup>	-24	-24	ASTM D471
Tensile Strength Change <sup>2</sup>	-45.0 %	-45.0 %	ASTM D471
Elongation Change <sup>2</sup>	-22.5 %	-22.5 %	ASTM D471

## Legal Statement

For detailed Product Stewardship information, please contact Customer Service.

## Notes

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

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

<sup>2</sup> Single sample or two sample average determinations

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

For additional technical, sales and order assistance: [www.exxonmobilchemical.com/ContactUs](http://www.exxonmobilchemical.com/ContactUs)

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