

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 ¹ | <ul style="list-style-type: none"> Africa & Middle East Asia Pacific | <ul style="list-style-type: none"> Europe Latin America | <ul style="list-style-type: none"> North America |
| Revision Date | 07/01/2019 | | |

| 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 ² /s | |
| 104°F (40°C) | 12.0 cSt | 12.0 mm ² /s | |
| -40°F (-40°C) ² | 1970 cSt | 1970 mm ² /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 ² (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 ² | 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 ² | 7.33E-4 (g/cm ³)/°C | 7.33E-4 (g/cm ³)/°C | ASTM D1250 |
| Fire Point, COC ² | 478 °F | 248 °C | ASTM D92 |
| Flash Point, PMCC ² | 338 °F | 170 °C | ASTM D93 |
| Evaporation Loss ² (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 ³ (With AO) | > 1210 min | > 1210 min | ASTM D2272 |
| Biodegradation ² | 78.5 % | 78.5 % | OECD 301F |

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

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

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

| Elastomer Compatibility, Polyacrylate | Typical Value (English) | Typical Value (SI) | Test Based On |
|---------------------------------------|-------------------------|--------------------|---------------|
| Volume Change ² | 42.1 % | 42.1 % | ASTM D471 |
| Hardness Change ² | -24 | -24 | ASTM D471 |
| Tensile Strength Change ² | -45.0 % | -45.0 % | ASTM D471 |
| Elongation Change ² | -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.

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: www.exxonmobilchemical.com/ContactUs

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