

EcoClear Hydraulic Oils

ISO Grades 22, 32, 46, 68, 100

Product Description

Relyant® EcoClear Hydraulic Oils have outstanding stability and anti-wear characteristics designed to meet the demanding requirements of major manufacturers and users of hydraulic equipment located in ecologic sensitive areas. These oils are zinc-free, environmentally friendly and distinguished by their clear appearance and clarity retention in operating systems, good rust protection, low deposit formation, rapid release of entrained air, oxidation resistance, low pour points, and good antifoam properties.

Applications

Recommended for critical application of van and gear pumps operated at elevated pressure levels, i.e. in excess of 6,900 kPa or 1000 psi. For systems incorporating axial piston pumps with pressures in excess of 3500 psi, these oils can be used where the manufacturer specifies anti-wear hydraulic oils. These oils are very effective in reducing pump wear, satisfying lubrication requirements of auxiliary system components, and greatly extending the life of systems operating at high loads, speeds, and temperatures. All ISO Grades satisfy requirements of Vickers I-286-S and M-2950-S; Cincinnati Milacron specifications P-68, P69, and P-70. They meet Denison HF-0 and HF-2 requirements. They are suitable for hydraulics operating in the forest industry, dredges, cranes and other hydraulic equipment on offshore drilling and production facilities. Dielectric strength is warranted at the origin and can be maintained providing low moisture contents are sustained and agitation under humid conditions are minimized.

Typical Properties

| Property | ISO 22 | ISO 32 | ISO 46 | ISO 68 | ISO 100 |
|---------------------------------|---------|---------|---------|---------|---------|
| Color, ASTM D-1500 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Appearance | Water | Water | Water | Water | Water |
| | Clear | Clear | Clear | Clear | Clear |
| Viscosity, cSt @ 40°C | 20.51 | 31.71 | 46.5 | 67.2 | 100.0 |
| Viscosity, cSt @ 100°C | 4.15 | 5.3 | 6.8 | 8.6 | 11.2 |
| Viscosity Index | 103 | 100 | 99 | 98 | 97 |
| Flash Point, COC (°F) | 400 | 400 | 410 | 425 | 450 |
| Pour Point (°F) | -25 | -35 | -25 | -20 | -5 |
| Neutralization No., ASTM D 974 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 |
| Gravity, API @ 60°F | 34.3 | 33.1 | 32.4 | 31.6 | 30.6 |
| Rust Test, ASTM D-665A/B | No Rust |
| Emulsion Test, ASTM D-1401 | 10 Min |
| Dielectric Strength, ASTM D-877 | 35KV | 35KV | 35KV | 35KV | 35KV |
| Oxidation Life, ASTM D-943 | +10,000 | +10,000 | +10,000 | +10,000 | +7,500 |
| (hrs to 2.0 TAN) | | | | | |

^{*}The values shown are typical of current production. Some are controlled in the manufacturing process while others are not. All of them may vary within tolerable ranges.