

## PREMIUM "HC" ANTI-WEAR HYDRAULIC OILS ISO GRADES 22, 32, 46, 68, 100

	Typical Properties				
ISO Grade	22	32	46	68	100
Color, ASTM D-1500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Appearance	WaterClear	WaterClear	WaterClear	WaterClear	WaterClear
Viscosity, cSt					
At 40 C	21.5	31.7	46.5	67.2	98.8
At 100 C	4.2	5.3	6.8	8.6	10.9
Viscosity Index	100	100	99	98	95
Flash Point, (COC) Deg F	395	400	415	425	450
Pour Point, Deg F	-30	-25	-25	-20	-5
Neut. No., ASTM D 974	0.55	0.55	0.55	0.55	0.55
Gravity, API @ 60 F	34.4	33.1	32.4	31.6	<b>31.</b> <i>O</i>
Rust Test, ASTM D 665A/B	No Rust	No Rust	No Rust	No Rust	No Rust
Emulsion Test, ASTM D-1401 (40-40-0)	10 Min	10 Min	10 Min	10 Min	10 Min
Dielectric Strength, ASTM D-877	35KV	35KV	35KV	35KV	35KV
Hydraulic Stability, ASTM D-2619					
Cu mass loss, mg/cm2	0.13	0.13	0.13	0.13	0.13
Oxidation Life, ASTM D 943					
Hrs	+7000	+7000	+7000	+6500	+6000

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.

The five grades are premium-quality anti-wear hydraulic oils with outstanding stability, designed to meet the demanding requirements of most all the major manufacturers and users of hydraulic equipment. These oils are characterized 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 anti-foam properties. They are formulated from highly refined hydrocracked base stocks with an effective anti-wear agent that helps reduce wear in high-speed, high-pressure vane and gear pumps.

## **APPLICATIONS**

Recommended for vane, gear, and piston-type pumps where operating pressures may exceed 3000 psi. These anti-wear hydraulic oils are very effective in reducing vane and gear pump wear and greatly extend the life of systems operating at high loads, speeds, and temperatures. In a clean dry system, typical value\*\* for ASTM D-877, "Dielectric Breakdown Voltage of Insulating Liquids" will exceed 30+ Kilovolts. These hydraulic oils are suitable for use in DIN 51524 HLP, Denison HF-0 (HM), Eaton-Vickers I-286-S, M-2950-S and Cincinnati Lamb Landis P-68, P-69, and P-70, GM LS-2, ISO 6743/4, ISO 11158, ASTM D-6158 (HM), BOSCH Rexroth RDE-90235, AIST 127, 126(USS), AFNOR NF E 48-603. SEB 181222.

\*\*Application ISO Grades 10, 15, 22, 32, 46, & 68 meet dielectric strength test results described in ASTM D-877 @ 30KV+ providing customer storage and containment are free of moisture under all conditions.