

Premium Anti-Wear “HD” Hydraulic Oils

ISO Grades: 10, 15, 22, 32, 46, 68, 100

Product Description

These premium-quality anti-wear hydraulic oils are formulated for demanding industrial and mobile hydraulic systems. Designed with high-performance additive systems, they deliver:

- Excellent wear protection for vane, gear, and piston pumps
- Outstanding rust and oxidation resistance
- Superior foam resistance and air release
- Good low-temperature fluidity and thermal stability
- High dielectric strength in clean, dry conditions

Applications

Recommended for use in high-pressure hydraulic systems including vane, gear, and piston-type pumps. Compatible with systems requiring:

- DIN 51524 HLP
- Denison HF-0, Eaton-Vickers I-286-S, M-2950-S
- Cincinnati Lamb P-68, P-69, 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

ISO Grades 10–68 also meet ASTM D-877 dielectric breakdown voltage at 30KV+, assuming storage and handling are moisture-free.

Typical Properties

Property	10	15	22	32	46	68	100
Viscosity, cSt @ 40°C	10.98	15.5	22.0	30.2	44.2	66.2	93.8
Viscosity, cSt @ 100°C	3.3	3.5	4.3	5.2	6.6	8.5	10.6
Viscosity Index	100	100	100	100	98	95	95
Flash Point, (COC), °F	370	380	395	405	425	445	460
Pour Point, °F	-35	-35	-30	-25	-20	-15	-0
Neutralization No., ASTM D-974	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Gravity, API @ 60°F	33.0	31.5	31.0	30.0	29.0	28.7	28.3
Oxidation Life, ASTM D-943, hrs	+6000	+6000	+6000	+6000	+6000	+6000	+5500
Rust Test, ASTM D-665 A & B	No Rust	No Rust	No Rust	No Rust	No Rust	No Rust	No Rust
Demulsibility, ASTM D-1401 Mins to 3 ml emulsion	20 Min	20 Min	20 Min	20 Min	20 Min	20 Min	20 Min
Dielectric Strength ASTM D-877	30KV+	30KV+	30KV+	30KV+	30KV+	30KV+	-

*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.