



## All-Purpose Hydraulic Oil (4932-4934)

Anti-wear hydraulic oil designed to assure longer life for bearings and rubbing surfaces. Contains select base oils for oxidation resistance and an additive package that offers rust protection, anti-wear properties, and thermal stability. Nonfoaming in service. Recommended for hydraulic systems operating in highly contaminated environments or where high lubricant consumption is a concern.

	<u>4932</u>	<u>4933</u>	<u>4934</u>
<b>Color</b>	Amber	Amber	Amber
<b>ISO Grade</b>	32	46	68
<b>Relative Density @ 60°F/60°F, ASTM D1298</b>	0.864	0.869	--
<b>Viscosity @ 100°C, cSt, ASTM D445</b>	5.34	6.76	8.74
<b>Viscosity @ 40°C, cSt, ASTM D445</b>	31.98	46.50	68.12
<b>Viscosity Index ASTM D2270</b>	95	95	95
<b>Flash Point °C (°F) (COC), ASTM D92</b>	222 (432)	230 (446)	244 (471)
<b>Pour Point °C (°F), ASTM D97</b>	-33 (-27)	-30 (-22)	-27 (-17)
<b>Rust Test 4 hrs @ 60°C, Sea H<sub>2</sub>O, ASTM D665B</b>	Pass	Pass	Pass
<b>Copper Corrosion 3 hrs @ 100°C, ASTM D130</b>	1a	1a	1a
<b>Emulsion Characteristics @ 54°C, oil-water-emulsion/minutes, ASTM D1401</b>	40-40-0/15	40-40-0/15	40-40-0/20
<b>Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892</b>	0/0, 0/0, 0/0	0/0, 0/0, 0/0	0/0, 0/0, 0/0

### Performance Requirements Met or Exceeded

- AFNOR NF E 48-603 (HM)
- CETOP RP91H
- Cincinnati Milacron P-68 (4932), P-69 (4934), and P-70 (4933)
- Denison HF-0
- DIN 51524 Part II
- USDA H2
- Vickers I-286-S3 (Industrial) and M-2950-S (Mobile)

### Typical Applications

- Applications include both mobile and stationary hydraulic systems that call for an anti-wear hydraulic fluid.