

# UNITED SYNTHETIC ANTI-VARNISH MV HYDRAULIC OIL



United Synthetic Anti-Varnish MV (Multi-Viscosity) Hydraulic Oils are formulated with a high viscosity index for all-season use in cold and hot weather.

## Features/Benefits:

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- Zinc-based anti-wear system protects vane, gear and piston pumps
- Excellent extreme-temperature properties reduce the need for seasonal oil changes
- Helps extend filter life
- Strong varnish-control properties improve system reliability
- High VI improves the likelihood of product consolidation
- Resists foam to help eliminate sponginess
- Resists electrical conductivity (dielectric strength > 35kv)
- Designed to reduce seal and hose leaks

## Meets or Exceeds:

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- Denison HF-0, HF-1, HF-2 (ISO 32, ISO 46, ISO 68)
- Vickers I-286S, M2950S (ISO 32, ISO 46, ISO 68)
- DIN 51524 Parts 2&3 (ISO 32, ISO 46, ISO 68)

# TYPICAL SPECIFICATIONS

<b>ISO VG</b>	<b>22</b>	<b>32</b>	<b>46</b>	<b>68</b>
Viscosity @ 100°C (cSt), ASTM D445	5.3	6.5	8.5	11.1
Viscosity @ 40°C (cSt), ASTM D445	23.9	32.2	47.0	68.4
Viscosity Index, ASTM D2270	160	163	160	154
Density (lb/gal), ASTM D1298	7.005	7.042	7.093	7.149
Specific Gravity (g/ml), ASTM D1298	0.8413	0.8458	0.8519	0.8597
Pour Point (°C), ASTM D97	-48	-45	-43	-40
Pour Point (°F), ASTM D97	-54	-49	-45	-40
Flash Point (°C), ASTM D92	226	224	244	250
Flash Point (°F), ASTM D92	439	435	471	482
Four Ball Wear Test, ASTM D4172 75°C, 1200 rpm, 40kg, 1 hr	0.42	0.42	0.41	0.41
KRL Shear Stability (High VI) 20 hours, 15% Max, SIG (Stay In Grade) DIN 51350-6	Pass	Pass	Pass	Pass
Copper Corrosion 100°C, 3 hr., ASTM D130	1A	1A	1A	1A
Dielectric Strength >35kv, ASTM D877	47	45	44	45
Brookfield Viscosity @ -20°C ASTM D2983	760	1300	1980	3870

## Product Availability:

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- 5 Gallon Pail
- 55 Gallon Drum
- 275 Gallon Tote