



Super Hydraulic Oil

Conoco Super Hydraulic Oil is high-quality, antiwear hydraulic oil developed for use in a wide variety of machine hydraulic systems operating at high pressures. It is available in six straight viscosity grades (ISO 22, 32, 46, 68, 100 and 150) and two high-viscosity index multigrades (MV 22 and MV 32).

Super Hydraulic Oil is formulated with high-quality base oils and fortified with additives to provide superior wear protection, rust and corrosion inhibition, oxidative and thermal stability, foam inhibition, and excellent water separation.

Super Hydraulic Oil meets the performance requirements of leading hydraulic pump manufacturers such as Cincinnati Machine, Denison, Oilgear, Racine, Bosch, Rexroth, Sundstrand, Vickers and Voith. It is approved by Cincinnati Machine under specifications P-68 (ISO 32), P-70 (ISO 46) and P-69 (ISO 68).

It meets DIN 51524, part 2, GM LS-2 and U.S. Steel 126, 127 and 136.

Applications

- Mobile and stationary equipment
- Automated machine tools
- Farm tractor implements
- Pivots used in irrigation systems
- Plain and antifriction bearings used in electric motors
- Chain drives
- Hydraulic systems on dump trucks, motor graders, bulldozers and forklifts
- Service station lifts
- Machine shop hydraulic presses, shears, jacks and punches
- High line repair trucks

Super Hydraulic Oil MV 22 and MV 32 are specially developed for use in mobile hydraulic systems such as cherry pickers, bucket trucks and tree-trimming units operating at low temperature. Both have a high-dielectric strength, which makes them suitable as insulating oil. However, in order to maintain the high-dielectric strength, water contamination must be prevented by conducting routine oil analysis.

Outstanding Features

- Excellent wear protection
- Wide variety of applications
- Excellent corrosion protection
- High-dielectric strength
- Excellent low-temperature performance

**High-Quality,
Antiwear Hydraulic
Oil**

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**Super Hydraulic Oil
Typical Properties**

Product Grade	MV 22	MV 32	22	32	46	68	100	150
ISO Grade	22	32	22	32	46	68	100	150
Gravity, ° API	32.5	32.3	33.3	32.6	31.6	31.0	30.7	29.4
Specific Gravity, @ 60° F (15.6°C)	0.863	0.864	0.859	0.862	0.868	0.871	0.873	0.879
Density, lb/gal	7.20	7.21	7.16	7.19	7.23	7.26	7.27	7.33
Flash Point (COC), °F	379	399	385	421	441	460	486	525
°C	193	204	196	216	227	238	252	274
Pour Point, °F	-54	-45	-40	-35	-31	-27	-26	-6
°C	-48	43	-40	-37	-35	-33	-32	-21
Viscosity, cSt @ 40°C	20.8	32.7	22.8	31.0	46.0	68.0	100.0	149
cSt @ 100°C	5.1	6.3	4.4	5.4	6.8	8.0	11.0	14.7
SUS @ 100°F	108	167	115	165	237	353	523	782
SUS @ 210°F	43	47	41	44	49	56	64	79
Viscosity Index	144	145	104	104	100	99	98	98
Total Acid No.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Dielectric Strength, kv	35	35	35	35	35	35	35	35
FZG Gear Test, Pass Stage	—	—	10	10	10	10	10	10
ASTM Color	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.0
Oxidation stability, ASTM D943, hrs	>5,000	>5,000	>5,000	>5,000	>5,000	>5,000	>5,000	>4,500
Copper Strip Corrosion Test (D130)	1a	1a	1a	1a	1a	1a	1a	1a
Rust Test, A&B, D665	pass	pass	pass	pass	pass	pass	pass	pass
Pump Wear Test, D2882	<50 mg	<50 mg	<50 mg	<50 mg	<50 mg	<50 mg	<50 mg	<50 mg

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