



265 Jefferson Avenue • Cleveland, Ohio 44113-2594
(216) 771-4300 • Ohio WATS (800) 362-1530
Fax (216) 771-1845

Product Information

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UNIVERSAL NZP HYDRAULIC OILS

Product Description

Universal NZP Hydraulic Oils are fully formulated ashless hydraulic oils. The product provides protection against wear, rust, corrosion, and foaming, thermal breakdown and exhibits excellent water separation and filterability properties.

Applications

Universal NZP Hydraulic Oils meet the requirements of both high and low-pressure industrial and mobile hydraulic systems.

Universal NZP Hydraulic Oil ISO Grades 22, 32, 46, 68, 100, 150, 220, and 460 meet or exceed the requirements for industrial and mobile equipment hydraulic systems, which call for:

- Vickers I-286-S, M-2950-S
- AAMA 51524 (ii)
- DIN 51524, Part 2
- German Steel Ind. SEB 181222
- SAE MS 1004
- Denison HF-1, HF-2, HF-0
- Bosch Rexroth RE 90 220
- Cincinnati Machine P-68, P-69 P-70
- U.S. Steel 126, 127, 136
- Commercial Hydraulics
- AFNOR NF 48-603 Part 1
- General Motors LS-2

Benefits

- Anti-Foam: Good air release properties.
- Anti-Wear: Provides excellent wear protection.
- Anti-Rust: Protects against rust and corrosion on steel and copper.
- Oxidation Stability: 2000 – 4000 hours, ASTM D 943
- Low Temperature Fluidity: Extends the useful temperature operating range.
- Water Separation (Demulsibility): Separates easily from water to minimize rust, filter blockage, and oil fluidity changes.

Refer to Universal Oil's Material Safety Data Sheet (MSDS) [16-19-25](#) for additional information.

UNIVERSAL NZP HYDRAULIC OILS

Specifications

Typical Property	ASTM Test Method	ISO 22	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150	ISO 220	ISO 460
ISO Viscosity Grade		22	32	46	68	100	150	220	460
Gravity, Deg. API	D287	34.0	32.6	31.8	31.6	29.9	29.0	28.4	27.0
Pounds Per Gallon		7.11	7.18	7.22	7.22	7.30	7.34	7.37	7.43
Viscosity									
@ 40° C, cSt	D445	21.8	30.4	43.7	64.6	100	145	218	482
@ 100° C, cSt	D445	4.2	5.2	6.5	8.4	11	14.2	18.3	30.6
@ 100° F, SUS	D2161	114	157	225	334	528	715	1175	2585
@ 210° F, SUS	D2161	40.4	44	48	55	65	73	97	155
Viscosity Index, Min.	D2270	95	98	98	99	96	96	96	96
Pour Point, Degrees F	D97	-29°	-27°	-22°	-22°	0°	0°	+5°	+5°
Flash Point, Degrees F Min.	D 92	400°	425°	435°	455°	500°	500°	500°	500°
Oxidation Stability	D 943	>4000	>4000	>4000	>4000	>3000	>3000	>2500	>2500
Demulsibility	D1401								
ML: Oil: Water: Cuff		----	40-40-0	40-40-0	40-40-0	40-40-0	40-40-0	40-40-0	40-40-0
(Min)		----	(15)	(15)	(15)	(15)	(15)	(15)	(15)

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265 Jefferson Avenue
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Universal Oil, Inc

Phone 216 771 4300
Fax 216 771 1845