

# AZOLLA ZS



LUBRICATION



**TOTAL**

## High Viscosity Index Anti-Wear Hydraulic Oil.

### APPLICATIONS

#### Hydraulic systems.

- **AZOLLA ZS** oils are premium anti-wear hydraulic fluids and lubricants. They meet or exceed the requirements of the leading manufacturers of hydraulic equipment and are available in a wide range of viscosities from ISO 22 to ISO 150.
- **AZOLLA ZS** oils have been specifically designed to be used in all types of hydraulic pumps and motors that require the use of anti-wear hydraulic oils. The appropriate viscosity grade will provide excellent service in plain and anti-friction bearings and moderate service in gear reducers.

### SPECIFICATIONS

#### International specifications.

- DENISON HF-0, HF-1, HF-2
- VICKERS I-286-S, M-2950-S
- ISO 6743/4 CATEGORY L-HM
- CINCINNATI MILACRON P68, P69, P70
- DIN 51524 PART 2 CATEGORY HLP
- AFNOR E48603 CATEGORY HM

### ADVANTAGES

#### Long equipment life and high operating reliability.

- Excellent anti-wear properties.
- Resistance to hydrolysis and oxidation.
- Inert towards metals (non-staining and no corrosive wear).
- Good compatibility with elastomers and seals.
- Excellent water/oil demulsification properties.
- Excellent anti-foaming, anti-corrosion, and anti-oxidation properties.

TYPICAL CHARACTERISTICS	METHODS	AZOLLA ZS					
		22	32	46	68	100	150
Viscosity at 40°C, cSt	ASTM D 445	22.0	32.0	46.0	68.0	100.0	150.0
Viscosity at 100°C, cSt	ASTM D 445	4.2	5.3	6.2	8.7	11.1	14.2
Viscosity Index	ASTM D 2270	> 95	> 95	> 95	> 95	> 95	> 95
Density @ 60°F, lbs./gal.	ASTM D 1298	7.19	7.24	7.28	7.30	7.35	7.38
Specific Gravity @ 60/60°F	ASTM D 1298	0.861	0.867	0.872	0.874	0.881	0.884
Pour Point, °F	ASTM D 97	-30	-30	-13	-13	1	5
Flash Point, COC, °F	ASTM D 92	390	405	415	450	480	500
Copper Strip Corrosion	ASTM D 130	1A	1A	1A	1A	1A	1A
4 Ball Wear Test, mm (75°C, 40kg, 1 hr @ 1200rpm)	ASTM D 2266	0.45	0.45	0.45	0.45	0.45	0.45
Oxidation Test	ASTM D 943	2000	3225	4025	3770	2000	2000

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