



Synergy HL Series

Anti-wear hydraulic oil

Premium quality, anti-wear hydraulic fluid designed for use in mobile and stationary high pressure hydraulic systems.

APPLICATIONS

- Industrial hydraulic systems
- Mobile and construction equipment hydraulics
- Hydraulic systems with vane, gear or piston pumps
- Plastic injection moulding machines
- Machine tools
- Enclosed gear systems
- Industrial circulating systems
- Reciprocating compressors

PERFORMANCE STANDARDS

- Denison Hydraulics HF-0 (ISO 32, 46 & 68)
- Vickers M-2952-S, I-286-S (Industrial applications), M-2950-S (Mobile applications) (ISO 32, 46 & 68)
- Cincinnati Milacron P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)
- David Brown Industrial Gears 0A, 1A, 2A, 3A, 4A & 5A

BENEFITS

- **Longer equipment life**
Special anti-wear additive package reduces wear by protecting surfaces when load causes breakdown of the lubricant film
- **Reduced downtime**
Effective rust and oxidation inhibitor system prevents the production of abrasive particles from rust formation, deposits, varnish and sludge from oil breakdown, which can damage equipment surfaces and seals, as well as block filters prematurely
- **Trouble free operation**
Good hydrolytic stability and water separation characteristics provide excellent filterability in the presence of water contamination. Good anti-foam and air release properties ensure smooth operation and system efficiency
- **Extended oil servicing life**
High oxidation stability resists all thickening and deposit formation in service, eliminating the need for unscheduled change of hydraulic fluid



KEY PROPERTIES

ISO VG Grade		32	46	68	100	150	220
Air Release @50°C, mins		4.0	7.5	9.0	12.0	15.0	19.0
Flash Point, COC, °C		210.0	220.0	226.0	240.0	250.0	260.0
Pour Point, °C		-33.0	-33.0	-30.0	-21.0	-15.0	-12
Viscosity	mm ² /s @40°C	30.5	44.0	65.0	95.5	152.0	222.0
	mm ² /s @100°C	5.3	6.7	8.6	10.8	14.7	18.9
Viscosity Index		106.0	106.0	104.0	97.0	97.0	97.0

ENVIRONMENTAL, HEALTH & SAFETY

Environmental, Health & Safety Information of this product is available in Synergy Material Safety Data Sheet (MSDS). Customers are encouraged to review this information, follow precautions and comply with laws and regulations consuming product use and disposal. To obtain MSDS for this product, please contact Synergy Lubricant Technology Department.

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variations not exacting performance can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.