



# Indol® Ultra Clean

## Anti-Wear Hydraulic Oil

### General Description

Indol® Ultra Clean is a premium anti-wear hydraulic oil formulated with the highest quality Group II base oils and superior additive technology to exceed the performance requirements of major pump manufacturers.

The formulation is the same as Indol, however, this series of Indol goes through a special filtering process for select ISO grades. This process ensures that the Ultra Clean formulation prevents excess wear under high-pressure and tight manufacturing conditions.

Like Indol, the Indol Ultra Clean contains zinc anti-wear agents used to help minimize wear in high speed, high pressure vane and gear pumps while meeting the lubrication and requirements for bronze axial piston pumps. Indol Ultra Clean is also highly stable under thermal or oxidative stress and is exceptionally stable when in the presence of moisture.

### Features and Benefits

- **Oxidation Control:** Excellent oxidation and thermal stability reduces sludge and varnish providing protection of critical components, while extending oil and equipment life.
- **Ultra Clean:** Additional filtering provides ultra clean oils for maximum system protection.
- **Wear Protection:** The premium anti-wear technology provides protection that passes major hydraulic equipment manufacturers pump tests resulting in longer life.
- **Filterability:** Superior hydrolytic stability with quick water separation provides protection against filter plugging and deposits.
- **Rust and Corrosion Protection:** Reduced maintenance due to outstanding rust and corrosion prevention capabilities when moisture is present.
- **Foam Control:** A special anti-foam agent promotes the rapid break up of foam and reduces air entrainment.
- **High Viscosity Index:** The shear stability of Indol MV provides exceptional viscosity stability, resulting in consistent operation throughout extreme temperature ranges and prolonged drain intervals.
- **Reserve Quality:** Indol premium anti-wear hydraulic oils have the ability to maintain their high level of performance under the toughest operating and extended drain conditions.

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### Typical Applications/Recommendations

- Denison HF-0, HF-1, HF-2
- Cincinnati Lamb P-68, P-69, P-70
- Eaton Vickers I-286-S, M2950-S (35VQ25)
- Rexroth, Parker Hannifin
- Marzocchi, Racine S
- DIN 51524-2, GM LS-2, AFNOR 48-603
- U.S. Steel 126, 127, 136
- ASTM D-665, Rust Test A&B: Pass
- ASTM D-943 Oxidation Test: 9,000+Hrs

### Typical Customers

#### Owners and operators of:

- Mobile/Industrial Hydraulic Systems
- Electric Utility Maintenance Equipment
- Enclosed Gear Sets
- Circulating Systems
- Air Compressors and Vacuum Pumps
- Injection Molding Machines

### Typical Properties

ISO Viscosity Grade	MV-32	22	32	46	68
Approximate SAE Grade	(5W-20)	(5W)	(10W)	(20W)	(20)
Viscosity @ 100°C, cSt	6.6	4.4	5.5	6.9	8.8
SUS	46.5	40.6	44.3	48.5	55.1
@ 40°C, cSt	33.3	22.1	32.4	46.5	69.0
SUS	156	106	150	215	313
Viscosity Index	158	108	106	104	100
Pour Point, °C / °F	-48/-54	-42/-44	-42/-44	-39/-38	-36/-33
API Gravity / lbs./gal.	32.3/7.19	33.4/7.15	32.1 /7.2	31.2/7.24	30.6/7.27
Flash Point, °F	400	400	420	440	460
Dielectric Strength, KV	40*	40*	40*	40*	40*
Indol (Ultra Clean) series	Yes*	Yes*	Yes*	Yes*	Yes*

\*This Dielectric Strength and Ultra clean specification are only found in the above products that are in new sealed drums, totes, and 2½ -gallon containers from CHS Lubricant manufacturing plants. The drums and totes will have the ultra clean logo on them.

The typical properties listed reflect the general characteristics of the product, and are not manufacturing specifications. Normal batch-to-batch variations should be expected.

### Health & Safety

A complete safety data sheet is available by calling 1-651-355-8438 or visit [cenex.com/sds-library](http://cenex.com/sds-library).