



# TECHNICAL DATA BULLETIN

**6601-6604  
LOW TOX<sup>®</sup>  
Hydraulic Oil**

**LEADERS IN LUBRICANTS**

## DESCRIPTION:

Low toxicity hydraulic oil designed with advanced product technology that gives performance equivalent to premium hydraulic fluids, yet affords low eco-toxicity to address environmental concerns. Has a low order of toxicity compared to standard commercial hydraulic oils and biodegradable hydraulic oil.

## PHYSICAL CHARACTERISTICS—TYPICAL:

	<b>6601</b>	<b>6602</b>	<b>6603</b>	<b>6604</b>
ISO Grade	32	46	68	100
Gravity, °API	29.3	28.3	28.3	28.0
Viscosity,				
SUS @ 100°F	165.8	227.4	353.2	500.2
SUS @ 210°F	44.4	48.3	56.9	67.2
cSt @ 40°C	32.3	44.3	68.6	96.9
cSt @ 100°C	5.5	6.7	9.2	12.0
Viscosity Index	95	95	95	95
Flash Point, °F (°C)	420 (216)	470 (244)	515 (268)	515 (268)
Pour Point, °F (°C)	0 (-18)	10 (-12)	10 (-12)	10 (-12)
Color	Straw	Straw	Straw	Straw

## TEST RESULTS:

Copper Strip Corrosion, ASTM D-130, Color Code	1b	1b	1b	1b
Salt Water Rust Test, 48 hrs., ASTM D-665B	No Rust	No Rust	No Rust	No Rust
Rotary bomb Oxidation Test, mins. (typical), ASTM D-2272	1,180	1,180	1,180	1,180
Demulsibility, ASTM D-1401, ml oil-ml water-ml emulsion (min.)	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)
Microtox Bioassay, EC50, mg/L, min.	>100,000	>100,000	>100,000	>100,000
Vickers Vane Pump Wear Test, ASTM D-2882, Total Wt. Loss	<50 mg	<50 mg	<50 mg	<50 mg
Cincinnati Machine Thermal Stability	Pass	Pass	Pass	Pass
Dielectric Strength, ASTM D-877, min.	35 kV	35 kV	35 kV	35 kV

## MEETS PERFORMANCE REQUIREMENTS OF:

Vickers Industrial (I-286-S)  
Cincinnati Machine – P-70 — 6602

Denison HF-O  
Cincinnati Machine – P-69 — 6603  
Cincinnati Machine – P-68 — 6603

## APPLICATION:

Designed for use where environmental concerns require the use of a very low toxicity hydraulic oil. Applications include hydroelectric facilities, flood control structures, locks, offshore installations, construction equipment, forestry equipment, dredges, water treatment plants, etc.

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**LE PRODUCTS MANUFACTURED UNDER AN  
ISO 9001:2000 CERTIFIED QUALITY SYSTEM**