



# TECHNICAL DATA SHEET

## HYPERION™ HYDRAULIC/TURBINE/COMPRESSOR OILS

Whitmore's Hyperion™ oils bring together several developments in both base oil and additive technology to create a true multifunctional product. Hyperion™ oils meet the needs of today's high precision hydraulic systems, turbines, and air compressors.

Hyperion™ has been formulated using the highest quality severely hydroprocessed paraffinic oils. Laboratory tests and field experience have clearly demonstrated the positive impact of these base oils on finished product properties and performance.

In laboratory tests, Hyperion™ severely hydroprocessed base oil shows a major reduction in evaporation loss. Oxidation stability exceeds that of conventional base oils by 60-100%. These performance improvements translate into reduced carbon and varnish deposits. The end result is longer oil and component life.

Whitmore uses an ashless (zinc-free) additive system that has been specifically tailored to these base oils. This further enhances the longevity and high temperature performance of the Hyperion™ series. An extension in oil life of 50% can be expected. (The use of oil analysis to determine ideal change frequency is recommended.)

Use Hyperion™ in rotary screw compressors where the discharge temperature ranges up to 190°F (88°C).

### BENEFITS:

- **LONG LIFE** - 50% longer oil life. Further extension is possible depending on operating temperature and maintenance practices, such as filtration.
- **REDUCED DEPOSITS** - less carbon and varnish means reduced stress and wear on components.
- **ANTIWEAR PROTECTION** - offers wear protection without the surface deposits that are created by zinc-based additive systems. These deposits can cause stickiness in high-precision spool valves.
- **RESISTS FOAMING** - low foaming tendency. Entrained air is readily released.

### APPLICATIONS:

Hyperion™ oils are suitable for use in hydraulic systems, turbines and the majority of flooded screw, flooded rotary vane, and reciprocating air compressors. They are also suitable for use on conveyor chains operating at temperatures up to 200°F (93°C). Viscosity grade ISO 32 is recommended for use in compressed air systems for lubrication of air operated tools.

Meets the following OEM requirements:

Vickers	1-286-S, M-2950-S
Denison	HF-1, HF-2, HF-0
U.S. Steel	127, 136
Cincinnati Milacron	P-68, P-69, P-70
General Motors	LH-04-1, LH-06-01, LH-15-1

ASTM #		TYPICAL CHARACTERISTICS							
		32	46	68	100	150	220	320	460
D-445	<b>ISO Grade</b>	32	46	68	100	150	220	320	460
	<b>Kinematic Viscosity</b>								
	cSt @ 40°C	31	43	64	92	146	220	307	467
	cSt @ 100°C	5	7	9	11	14	19	24	31
D-2270	<b>Viscosity Index</b>	99	102	103	96	95	97	95	94
D-97	<b>Pour Point, °F (°C)</b>	-25 (-32)	-25 (-32)	-25 (-32)	-15 (-26)	-15 (-26)	0 (-18)	10 (-12)	0 (-18)
Gardner	<b>Density, lb/gal @ 60°F (15.5°C)</b>	7.19	7.21	7.26	7.30	7.36	7.38	7.40	7.43
Method	<b>Specific Gravity, g/cc @ 60°F (15.5°C)</b>	0.861	0.863	0.869	0.874	0.881	0.883	0.885	0.889
D-92	<b>Flash Point, °F</b>	400	410	425	440	485	525	530	535
	(°C)	(204)	(210)	(218)	(227)	(252)	(274)	(277)	(279)
D-4172	<b>Four Ball Wear</b>								
	Scar Width, mm @ 40 kgf	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Modified	<b>Four Ball Wear, Scar Width mm</b>								
	60 min, 400 N, 1,420 rpm	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
D-665	<b>Rust Test</b>	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D-2272	<b>Oxidation Stability,</b>								
	rotary bomb hrs @ 302°F	26	27	28	30	22	19	15	NA
D-189	<b>Conradson Carbon Residue, % Carbon</b>	0.04	0.05	0.05	0.06	0.06	0.14	0.18	NA
D-943	<b>Oxidation Stability, hrs</b>	10,000	10,000	10,000	10,000	10,000	10,000	10,000	NA
	<b>FZG Stages Passed</b>	>12	>12	>12	>12	>12	>12	>12	>12

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

### PACKAGING

Drums	Kegs	Pails
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### THE WHITMORE MANUFACTURING COMPANY

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