



TECHNICAL DATA SHEET

DECATHLON™ HTC SYNTHETIC HIGH TEMPERATURE OILS

Since their introduction to the Whitmore product line, Whitmore's Decathlon™ HTC oils have proven again and again that they can meet and exceed the performance requirements of the most demanding high temperature applications.

Increasingly OEM's are realizing that the lubricant, far from being an afterthought, can expand the capabilities of equipment, and help provide a performance advantage.

In the area of high temperature lubrication, Decathlon™ HTC oils have given that "edge" in comparison to both well-known and exotic brands of synthetic oil.

Decathlon™ HTC oils are recommended when deposits such as carbon and varnish are not tolerable. The thin film evaporation characteristics of HTC oils are excellent. However, an even more crucial issue is residue. Carbon deposits and varnish cause wear. Not only will Decathlon™ HTC oils not cause these deposits, if equipment is currently suffering from this contamination, the natural detergency of HTC oils will loosen and dissolve it.

HTC oils are a blend of complex synthetic base fluids and a revolutionary combination of synergistic antioxidants

Decathlon™ HTC oils are formulated to protect against a corrosive atmosphere and resist oxidation at high temperatures.

Decathlon™ HTC oils can support fluid film lubrication on chain pins, bearings, and wire ropes at high temperatures.

BENEFITS:

- **OXIDATION RESISTANCE** - low formation of carbon, varnish, and other residues. Absolutely no abrasive deposits are formed when used within the recommended temperature range (see below).
- **ANTIWEAR** - chain wear is controlled by excellent fluid film and antiwear properties of a temperature stable additive chemistry.

APPLICATIONS:

Decathlon™ HTC oils are recommended for use up to 450°F (230°C) and intermittent service up to 550°F (285°C).

Decathlon™ HTC oils are designed for the lubrication of roller chains, bearings and wire ropes, where protection from wear at high temperatures is needed.

Decathlon™ HTC 930 oil is highly suitable for use in glass bottle forming operations for lubrication of the Glass Machine itself, also conveyor chains, and gearboxes operating at both normal and high temperatures.

Use HTC oils on machines for manufacturing light bulbs and also on continuous presses for manufacture of medium density fiberboard.

ASTM #		TYPICAL CHARACTERISTICS			
		HTC 143-100	HTC 143-150	HTC 930	HTC 947
	Grade	ISO 100	ISO 150	SAE 40	SAE 40
D-445	Kinematic Viscosity				
	cSt @ 40°C	102	157	200	200
	cSt @ 100°C	11	14	16	16
D-2161	Saybolt Viscosity				
	SUS @ 100°F	489	756	966	966
	SUS @ 210°F	52	65	76	76
D-2270	Viscosity Index	85	75	76	76
D-97	Pour Point, °F (°C)	-35 (-37)	-30 (-34)	-25 (-32)	-25 (-32)
Gardner	Density, lb/gal @ 60°F (15.5°C)	7.95	7.99	8.02	8.04
Method	Specific Gravity, g/cc @ 60°F (15.5°C)	0.955	0.959	0.963	0.965
D-92	Flash Point, °F (°C) Cleveland Open Cup	520 (271)	520 (271)	520 (271)	520 (271)
D-92	Fire Point, °F (°C) Cleveland Open Cup	590 (310)	590 (310)	590 (310)	590 (310)
D-4172	Four Ball Wear, Scar Width, mm @ 40 kgf	0.30	0.30	0.30	0.30
D-665	Rust Test, Distilled Water	Pass	Pass	Pass	Pass
D-130	Copper Strip Corrosion				
	212°F (100°C) @ 3 hr	1B	1B	1B	1B
D-972 (Modified)	Thin Film Evaporation, % Loss	3	2	2	2
	@ 428°F (220°C) @ 6.5 hrs				
D-189	Conradson Carbon Residue, % Carbon	0.09	0.09	0.02	0.10
	Solid Lubricants	No	No	No	Yes

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

PACKAGING

Drums	Pails
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Performance Under Pressure Since 1893

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