



Molysyn Manufacturing Co.

ISO
9002
Certified

TECHNICAL DATA

M-520 MULTI-PURPOSE SYNTHETIC BLEND HTC OIL

Molysyn-520 – Supreme Synthetic Multi-Purpose lubricant is the exceptional versatile industrial maintenance premium quality Synthetic, Non-Detergent, Rust and Oxidation Inhibited, Antiwear Oil that is specially formulated to meet the lubrication requirements of all types of air lines, pumps, vacuum pumps, turbine, compressor, bearing and general oiling applications. And in all industrial circulating systems where the highest quality rust and oxidation inhibited is required.

FEATURES:

- High VI paraffin base stocks, retain uniform viscosity over wide temperature Range
- Exclusive anti-oxidation inhibitor for long life at elevated temperatures.
- Excellent low temperature properties: This results in bearing and other machine part being instantly lubricated at sub-zero temperatures the moment they start turning.
- Superior oxidation stability and resistance to thermal degradation: Any oil as it is increasingly exposed to high temperature operation undergoes the process of oxidation. This results in the oil's thickening and buildup of acidic components. Because of the PAO and 100% paraffin base oil's uniform molecular structure, the process of oxidation is greatly reduced.
- Excellent film strength: This results in increased wear protection. Base oils have better specific heat values (less heat is absorbed) and better thermal conductivity.
- Excellent hydrolytic and demulsibility characteristics: This results in the separation of water much faster and more completely, allowing the water to be easily removed from the system. These properties result in increased bearing, pump and gear life, antiwear protection and improved rust and corrosion protection.

PRODUCT INFORMATION:

Molysyn-520- is the most advanced industrial Lubricating Oil, carefully refined with selected premium base stocks and advanced additive chemistry, an exclusive oxidation and wear inhibitors to provide much longer service life. Blended from high quality severely solvent refined severely hydro-finished high viscosity index base oils available. highly specialized non-corrosive thermally stable and thermally durable multifunctional extreme pressure additive package provides several advantages. It contains a proven friction reducer and boundary called Micron Moly. Micron Moly is a liquid soluble type moly that plates itself to the sliding and rubbing surfaces of the hydraulic, turbine and compressor systems. This plating action forms a long lasting solid lubricant film on these rubbing and sliding surfaces. This moly film withstand pressures up to 500,000 psi (pound per square inch). Once plated to the sliding and rubbing surfaces the Micron Moly not only produces a smooth finished surface, but also reduces friction between moving parts. This results in less heat being generated, which in turn not only reduces operating temperatures, but also downtime.



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Molysyn-520 Scientifically formulated from high quality, solvent - refined paraffin base stocks with the most advanced features. The trend among hydraulic pump builders and compressor manufacturers is to employ higher speed and pressures. Further many turbine systems, especially those that are geared type turbine systems are generally

HTC Supreme with the following performance benefits.

- 1. Exceptional antiwear protection**
- 2. Extended pump life & bearing life**
- 4. Enhanced thermal and oxidative stability**
- 5. Superior hydrolytic stability**
- 6. Excellent demulsibility characteristics**
- 7. Excellent rust and corrosion protection**
- 8. Excellent antifoaming and air release properties**
- 9. Reduced sludge, varnish and deposit formation**
- 10. Improved durability of non-ferrous parts**
- 11. Reduced filter blockage, enhanced filterability**
- 13. Enhanced compatibility with existing fluids**
- 14. Enhanced fluid life. Reduced system maintenance**

HTC Supreme meets and exceeds the following specifications and manufacturers' requirements: Haggulands Dension HF-O, Vickers I-286-S and M-2950-S, Rexnord, Commercial Shearing HD 2/900, Commercial Hydraulics, Cincinnati Milicron P-54, P-68, P-69, P-70, DIN 51524 Part 1 & 2, Lee-Norse 100-, Jeffery No. 87, U.S. Steel 126,127 and 136, AFNOR E 48-603, MIL-L-17331H, General Electric GEK 32568A, Brown Boveri HTGD 90117, Westinghouse turbine specifications, Ingersoll Rand, Joy, Garnder Denver, Sullair, Worthington, LeRoi, Quincy and Atlas Copco compressor specifications.

TYPICAL SPECIFICATION

ISO Viscosity	32	46	68	100	150
SAE GRADE	10	15	20	30	40
GRAVITY, °API	29.9	29.8	29.4	28.9	27.8
SPECIFIC @ 15.6 °C	0.877	0.877	0.879	0.897	0.892
VISCOSITY :					
SUS @ 100 ° F	166	228	339	522	789
SUS @ 210 ° F	44.2	48.1	54.4	64.3	78.0
cST @ 40 ° C	32.2	44.2	65.1	100	150
cST @ 100 ° C	5.3	6.5	8.4	11.1	14.6
VISCOSITY INDEX	99	99	99	95	95
POUR POINT, ° F (° C)	-15 / 35 C	-15 / 35 C	-10 / 31 C	-10 / 31 C	-8 / 31 C
FLASH POINT, ° F (° C)	403(206)	413(212)	435(224)	480(248.8)	485

DISTILLED

WATER.....PASS.....
 SALT
 WATER.....PASS.....

COPPER CORROSION:

3hrs @ 100 ° C	1	1	1	1	1
COLOR	Green	Green	Green	Green	Green