

All-Syn Hydraulic **Hydraulic Oil** No. 315

ISO: 15, 32, 46, 68, 100

DESCRIPTION:

All-Syn Hydraulic Oils are premium quality, ashless, highly oxidation stable, lubricants formulated to meet the requirements of all types of hydraulic systems. They are blended from high viscosity index polyalphaolefin (PAO) base oils and specially selected additives. They can be used in a wide variety of hydraulic applications where manufacturers recommend ashless oils. Special friction reducing and anti-oxidation additives make them excellent lubricants for use in extended drain interval programs.

PERFORMANCE CHARACTERISTICS:

- **Oxidation resistant (15,000 hours in the ASTM-D943 Oxidation Test)**
Oxidation inhibitors and premium quality PAO base oils combine to form a product with outstanding resistance to oxidation and provide the maximum protection against varnish formation at both high and low temperatures.
- **Provides excellent anti-wear protection**
Special ashless anti-wear additives provide the highest level of protection against wear and scuffing in all types of vane, piston, and gear pumps used in both low and high pressure hydraulic systems
- **Friction reduction**
Exclusive friction reducing additives provide reduced operating temperature and reduced horsepower requirements in comparison to conventional hydraulic oils.
- **Superior rust protection**
Inhibitors protect both steel and yellow metal surfaces against rust and corrosion
- **Superior filterability**
Designed to separate rapidly from water
- **High foam resistance**
Foam inhibitors provide foam resistance to prevent pump starvation and damage

TYPICAL APPLICATIONS:

All-Syn Hydraulic Oils are recommended for use as premium ashless hydraulic oils in all types of vane, gear and piston pumps. They meet and exceed the following service requirements for hydraulic pumps:

Vickers industrial & mobile applications
Cincinnati Milacron P-68, P-69, P-70

Denison HF-0
General Motors LH-04-1, LH-06-01, LH-15-1

SUMMARY:

Hydraulic oils are constantly subjected to adverse conditions such as moisture, long operating intervals, high temperatures and high pressures. Each of these factors affects the ability of the oil to perform efficiently and provide maximum output when needed. Oil deterioration and oxidation result not only in excessive wear, but deterioration of seals and O rings that lead to increased oil consumption. Gum and varnish buildup cause poor system performance and accelerated wear in bearings, pumps, valves, gears, motors and cylinders that can cause costly down time and frequent overhauls. **All-Syn Hydraulic Oils are formulated to greatly reduce these problems and provide maximum hydraulic system efficiency.**

TYPICAL SPECIFICATIONS:

ISO Grade	15	32	46	68	100
Specific Gravity	0.819	0.852	0.856	0.863	0.868
Viscosity					
@ 40°C, cSt	15.5	32.0	43.5	64.1	95.0
@ 100°C, cSt	3.63	5.80	7.25	9.60	12.7
@ 100°F, SUS	84.6	163	223	329	491
@ 210°F, SUS	38.5	45.7	50.4	58.7	70.6
Viscosity Index	118	125	128	131	130
Flash Point,					
°F	405	465	470	480	490
°C	207	241	243	249	254
FZG Load Stage	-	>11	>11	>11	>11
Fire Point,					
°F	430	495	505	515	525
°C	221	257	263	268	274
Pour Point,					
°F	-85	-60	-55	-40	-30
°C	-65	-51	-48	-40	-34

Values shown here are typical, and may vary.