



ADVANCED TECHNOLOGY IN LUBRICATION SINCE 1933

SWEPCO  
**703**

PERFORMANCE

## Synthetic Multi-Grade AW Hydraulic Oil



**Boosts Productivity  
As Much As 30%**

SWEPCO 703 Synthetic Multi-Grade AW Hydraulic Oil is especially formulated to deliver higher productivity for heavily loaded hydraulic systems. SWEPCO's **Syntheon™** base stock blends, proprietary **LUBIUM® II** anti-oxidant and advanced shear stable chemistry improve pump efficiencies and productivity, even on long hot summer days when other oils suffer high temperature thinning that causes sluggish operation or "afternoon fade". Operators will notice the difference in performance and you will notice the difference in your bottom line.



### KEY BENEFITS

- **Syntheon™** synthetic base stock blends insure exceptional performance throughout a wide temperature range
- New chemistry improves shear stability by 40%
- Prevents high temperature thinning and "afternoon fade", even on long hot summer days
- Improves pump efficiency & increases productivity by as much as 30% or more over conventional hydraulic oils
- Advanced **LUBIUM® II** anti-oxidant chemistry prevents carbon, varnish & other performance-robbing deposits
- Unexcelled anti-wear & anti-foam performance
- All-temperature formula eliminates seasonal changes
- Suitable for use in temperatures down to -49°F (-45°C)
- Can lower fuel costs in hydraulic intensive applications
- UV sensitive for fast leak detection

***Get maximum efficiency, more work out of your hydraulic equipment . . .***



**CONSTRUCTION**



**MARINE**



**MANUFACTURING**



**AGRICULTURE**

*Maximize your productivity with hard working SWEPCO 703 Synthetic Multi-Grade AW Hydraulic Oil.*

## Improves Productivity As Much As 30%

The hydraulic pump is the heart of a hydraulic system. But the pump is only as good as the hydraulic oil used. A major cause of loss of power is high temperature thinning of hydraulic oils. As the oil thins under continuous loads and high temperatures, pumps experience internal leakage or leakage of oil through pump vanes or pistons. This causes sluggish operation, loss of power and loss of productivity. Known as "afternoon fade" in the industry, high temperature thinning eats heavily into profits.

SWEPCO 703's combination of **Syntheon™** synthetic base stock blends and advanced new additive chemistry reduce shearing by 40% and are proven to improve pump efficiencies and productivity by as much as 30% in controlled field tests.

## More Effective Control of Varnish & Sludge

SWEPCO's proprietary **LUBIUM® II** anti-oxidant and anti-corrosion chemistry reinforces the base stock's natural resistance to oxidation. This helps insure superior thermal stability, reduces sludge and varnish deposits and extends lubricant life.

## Fights Friction and Wear

As heat begins to build up in the hydraulic system, SWEPCO's advanced anti-wear additive takes over to plate metal surfaces with an additional layer of protection from wear. This plating action occurs automatically whenever operating conditions require it. The result is a significant reduction in friction, cooler operating temperatures and longer life for hydraulic components and the lubricant itself.

## Excellent Foam Dispersion

Foaming is a major cause of surging, loss of power and overheating in hydraulic systems. SWEPCO 703 quickly disperses foam, permitting full power without overheating, surging or blown hoses.

## Rapid, Complete Demulsification

Another cause of power loss is the condensation of water within the oil reservoir and emulsification of the oil and water. SWEPCO 703 contains a demulsifier which effectively fights this power-robbing phenomena.

## Longer Lubricant Life - Reduced Oil Consumption

SWEPCO 703's superior thermal stability and resistance to oxidation, makes extended drain service possible and reduces make-up oil requirements. When combined with SWEPCO's **LabTec<sup>SM</sup>** Fluid Analysis Program, users of SWEPCO 703 can enjoy maximum lubricant life without risk.

## Cost-Cutting Multi-Grade, All Season Formulation

SWEPCO 703 provides exceptional cold and hot weather performance. Ideal for outdoor equipment or equipment in non-climate controlled facilities where hydraulic oil is currently being changed seasonally to maintain performance. Eliminates the cost of stocking two weights and changing oil with the seasons or operating conditions. Simplifies maintenance schedules and saves maintenance time and money.

## Energy Savings in Some Applications

Improved lubrication, higher pump efficiencies and greater productivity typically translate into lower fuel costs in hydraulic intensive applications, such as excavators.

## Typical Physical Characteristics

API Gravity, 60°F .....	31.1
Density, lb/gal (kg/l) .....	7.25 (0.87)
Viscosity, -40°C, cSt .....	34,840
Viscosity, -30°C, cSt .....	9,291
Viscosity, -20°C, cSt .....	3,484
Viscosity, 40°C, cSt .....	60.8
Viscosity, 100°C, cSt .....	11.3
Viscosity Index .....	182
Flash Point, COC, °F (°C), Min .....	425 (218)
Fire Point, °F (°C), Min .....	510 (265)
Pour Point, Min, °F (°C) .....	-58 (-50)
Dielectric Strength, volts, ASTM D-877 .....	>34,000

## Typical Performance Characteristics

Shear Stability, 40 min, KV 40°C, %, ASTM D-5621 .....	8
Oxidation, RPVOT minutes @150°C, ASTM D-2272A .....	1574
Oxidation, hrs to 2.0 TAN, ASTM D-943 .....	8,000+
4-Ball Wear, scar, mm, ASTM D-4172 .....	0.58
FZG, Damage Stage, ASTM D-5182 .....	11
Demulsibility, at 10 minutes, ASTM D-1401 .....	40/40/0
Copper Corrosion ASTM D-130 .....	1a
Steel Corrosion, ASTM D-665A & B .....	pass
Operating Temperature, °F (°C) .....	-49 to 374(-45 to 190)

*NOTE: Specific operating temperature range is dependent upon hydraulic pump viscometrics. Consult the OEM for viscosity requirements when operating in sub-zero temperatures.*

## Meets or Exceeds the Performance Requirements of the Following Specifications:

- Denison HF-0 • Cincinnati Machine P-68, P-69, P-70
- U.S.Steel 127, 136 • AFNOR NFE 48-603 • GM LS-2
- Sauer-Sunstrand • DIN 51524 Part II • USDA/NSF H2
- CFIA n1 (in closed systems)



**A Product of SPX Technology™.**

... the cutting edge performance SWEPCO Customers have come to expect.



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