

AWARD Synthetic Hydraulic Fluid HD46

PREMIUM ZINC FREE HYDRAULIC OIL

PRODUCT LINE

AWARD Lubricants Synthetic Hydraulic Fluid HD46 is a full synthetic, premium, high performance, zinc-free, anti-wear oil designed for use in environmentally sensitive areas. It provides maximum pump life and trouble-free service.

APPLICATIONS

AWARD Synthetic HD46 features excellent vane pump and piston pump performance. AWARD Synthetic HD46 offers the ability to control formation of contaminants to aid in preventing filter blockage. AWARD Synthetic HD46 resists deterioration and performs at superior levels, even at high operating temperatures, pressures and speeds and extremely low pour point ensures easy system start-up in cold conditions.

PERFORMANCE BENEFITS

- Inherently Biodegradable
- Contains no heavy metals such as barium, zinc and calcium
- 6000 Hour Oil Drain Capability (With Scheduled Oil Sampling)
- Rust and oxidation prevention capabilities
- Superior demulsibility, anti-foam characteristics and hydrolytic stability
- Resists deterioration
- Superior performance at high operating temperatures, pressures and speeds
- Low pour point optimal for North Americas extreme temperatures

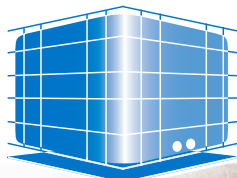
Available In These Sizes



Pails



Drums



Totes



TYPICAL PROPERTIES

ISO GRADE	46	ASTM TEST METHOD
Viscosity @ 40°C, cP	44.00	D445
Viscosity @ 100°C, cSt	9.00	D445
Viscosity Index	200	D2270
Flash Point, COC, °C (°F)	210(410)	D92
Pour Point, COC, °C (°F)	-51(-60)	D97
Color	Green	Visual
Gravity, °API	35.0	D287
Turbine Oil Oxidation	10,000+	D943
Copper Strip	1b	D130
Rust Test	Pass	D665
Dielectric Strength, kv	43	
FZG Load Stages	-	
Vane Pump, mgs wt loss	12	D2882
Pass Stage	12	D5182
Four Ball Wear	0.46	D2266

PERFORMANCE SUMMARY

SPECIFICATIONS AND APPROVALS	SYN HD46
FZG LS 11/12	Yes
AFNOR - NFE 48-690, NFE 48-691	Yes
Cincinnati Machine - P-68, P-69, P-70	Yes
Denison - HF-0, HF-1, HF-2	Yes
DIN 51524, Part I, Part II	Yes
General Motors - JS-2	Yes
Vickers - I-286-S, M-2950-S, 35VQ25	Yes
Bosch Rexroth - RE 90 220	Yes
ISO 11158 - Categories HH, HL, HM and HR	Yes
Hitachi - EXO 46 (MF46)	Yes

**Always consult with original equipment manufacturer's recommendations for specific performance and viscosity requirements.*

**Extending drain intervals should always be undertaken in conjunction with a regular oil analysis program.*

**Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notice.*

Health & Safety

This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

MSDS

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed.

MSDS can be found at:

<http://www.afdpetroleum.com/MSDS.aspx>

