



Gulf Harmony AW

High performance anti-wear hydraulic oil

Product Description

Gulf Harmony AW series are high performance anti-wear hydraulic oils developed for high pressure hydraulic systems operating under moderate to severe conditions in mobile and industrial service. These oils are formulated with high quality base oils and carefully selected performance additives to provide excellent protection against oxidation degradation, rust & corrosion and wear. They also possess superior foam control, water separation and rapid air release properties. The lower viscosity grades (ISO 10 through 100) are formulated with field proven thermally stable zinc based anti-wear additive system and the higher viscosity grades (ISO 150 through 460) are based on ashless anti-wear additive system. They exceed the performance requirements of global industry standards viz. DIN 51524 Part 2-HLP, AFNOR NFE 48-603 (HM) & ISO 11158 HM and majority of the international OEMs viz. Denison, FIVES CINCINNATI (Former MAG IAS, LLC) & Eaton (Vickers).

Features & Benefits

- Excellent thermo-oxidative stability controls the formation of sludge & varnish and improves oil life
- Exceptional anti-wear property results in longer pump and component life and reduces costs
- Superior demulsibility helps in faster separation of water from oil and resists formation of emulsions
- Special rust & corrosion inhibitors protect multi-metallurgy components even in presence of moisture
- Rapid air release property minimises chances of pump cavitation leading to trouble free operations
- Compatible with multi-metals and sealing materials commonly used in hydraulic systems

Applications

ISO VG 10 through VG 100

- Hydraulic systems operating under moderate to severe conditions in mobile and industrial service
- Older hydraulic systems where leakage is a problem and a cost-effective hydraulic oil providing all-round protection is required
- Mobile hydraulic fluid power transmission systems and general machine lubrication

ISO VG 150 through VG 460

- Recommended for a wide variety of following industrial applications requiring anti-wear type of oils:
 - Circulating oil systems
 - Plain and rolling element bearings
 - Gear sets
 - General Machine lubrication



Specifications, Approvals & Typical Properties

ISO Viscosity grades	10W	32	37	46	68	100	150	
Specifications								
DIN 51524 Part 2-HLP	X	X	X	X	X	X	X	
AFNOR NFE 48-603 (HM), ISO 11158 HM	X	X	X				X	
Eaton (Vickers) M-2950-S, M-2952-S, I-286-S				X	X	X		
Has the following Approvals								
FIVES CINCINNATI (Former MAG IAS, LLC)				P-68	P-70	P-69		
Denison HF-0, HF-1, HF-2				X	X	X		
Typical Properties								
Test Parameters	ASTM Method	Typical Values						
Viscosity @ 40 °C, cSt	D 445	31.9	31.4	36.9	45.8	68.1	99.1	149.9
Viscosity Index	D 2270	104	103	103	102	101	97	96
Flash Point, °C	D 92	218	218	224	230	254	261	272
Pour Point, °C	D 97	-12	-12	-9	-9	-9	-6	-6
Density @ 15°C, Kg/l	D 1298	0.87	0.87	0.88	0.87	0.88	0.88	0.895
Rust Test	D 665A/B	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Emulsion Test 30 minutes max	@ 54 °C	Pass	Pass	Pass	Pass	Pass	Pass	-
	@ 82 °C	D 1401	-	-	-	-	-	Pass
Foam Test, foam after 10 minutes of settling for all sequences	D 892	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Turbine Oil Stability Test, hrs	D 943	2000+			2500+			2000+
FZG, fail load stage, minimum	DIN 51354	-	-	-	11	11	11	11
Products code	-	5018	5028	5038	5048	5078	5108	5098

Properties mentioned above are typical only and minor variation, which do not affect the product performance, are to be expected in normal manufacturing. The above information is based on history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The material safety Data Sheet for this product is available from our nearest Gulf KSA Distributor.