Gulf Harmony HVI Premium

Very High Viscosity Index Anti-wear Hydraulic Oil

Product Description

Gulf Harmony HVI Premiumare supreme quality anti-wear hydraulic oils specially developed for applications subjected to wide range of temperature or where minimal viscosity change with fluctuating temperature is needed, available in ISO VG 32,46 & 68. Its outstanding thermo-oxidative stability and low & high temperature performance allows for extended service life. They provide excellent anti-wear protection, rust & corrosion protection, water separation & air-release properties and hydrolytic stability for reliable performance and thus help improve productivity.
It exceeds the performance requirements of global industry standards viz. DIN 51524 Part 3 HVLP, AFNOR NFE 48-603 (HV) & ISO 11158 HV and majority of the international OEMs viz. Hitachi, FIVES CINCINNATI (Former MAG IAS, LLC), Eaton & Denison.

Features & Benefits

- Outstanding thermo-oxidative stability helps reduce deposit formation to provide improved pump performance and extended oil/ filter change interval.
- Extremely high viscosity index assures equipment protection at cold start-up temperatures as well as at high operating temperatures.
- Exceptional anti-wear property results in fewer breakdowns, longer pump life and reduced maintenance costs.
- Reliable/ Dependable performance in presence of moisture present in the system:
  - Excellent demulsibility helps in faster separation of water from oil
  - Special rust & corrosion inhibitors protect multi-metallurgy components against negative effects of moisture
  - Offers long term hydrolytic stability and filterability
- Rapid air release property minimises chances of pump cavitation and thus prevents component damage.
- Compatible with multi-metals & most sealing materials used in hydraulic system.

Applications

- Hydraulic systems subjected to a very wide range of ambient & operating temperatures.
- Applications requiring extended oil change intervals.
- Critical hydraulic systems such as high accuracy numerically controlled machine tools and those employing close clearance servo valves.
- Hydraulic systems of excavators, cranes, tunnel boring machines and hydrostatic drives subjected to most severe outdoor operating conditions.
- Hydraulic systems operating under high pressures and requiring high degree of load carrying capability and anti-wear protection.

Specifications, Approvals & Typical Properties

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ISO Viscosity grades		32	46	68
Meets the following Specifications				
DIN 51524 Part 3 HVLP		X	X	X
AFNOR NFE 48-603 (HV)		X	X	X
ISO 11158 HV		X	X	X
Denison HF-0, HF-1, HF-2		X	X	X
Eaton (Vickers) M-2950-S, M-2952-S, I-286-S		X	X	X
Bosch Rexroth 07 075 for vane, piston & gear pumps, Sauer Danfoss 520L0463		X	X	X
Typical Properties				
Test Parameters	**ASTM**	**Typical Value**		
Viscosity @ 40 ºC, cSt	D 445	32.6	46.0	68.2
Viscosity Index	D 2270	165	165	165
Flash Point, ºC	D 92	218	226	240
Pour Point, ºC	D 97	-38	-36	-36
Density @ 15ºC, Kg/l	D 1298	0.844	0.858	0.872
Rust Test	D 665B	Pass	Pass	Pass
Emulsion Test (O/W/E ml) @ 54 oC 30 minutes max	D 1401	Pass 40-40-0 (6 minutes)	Pass 40-40-0 (7 minutes)	Pass 40-40-0 (10 minutes)
Foam Test, foam after 10 minutes of settling for all sequences	D 892	0/0 10/0 0/0	Nil	Nil
Turbine Oil Stability Test, hrs	D 943	5000+	5000+	5000+
FZG, fail load stage, minimum	DIN 51354 Part II	11	11	11

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