



Product Bulletin

GULF HARMONY[®] AW HYDRAULIC FLUID MG

Gulf Harmony[®] AW Hydraulic Fluid MG are premium multi-grade (MG), anti-wear (AW) fluids for use in off-road equipment and other hydraulic systems that experience fluctuations in fluid temperatures from cold morning start-up to extended heavy usage in hot weather. In many cases stationary systems can also benefit by staying within optimum operating viscosity range as sump temperatures can change throughout a work shift.

FEATURES AND BENEFITS:

Gulf Harmony[®] AW Hydraulic Fluid MG series is designed for reduced variance of viscosity in the working fluid as the temperature changes. Extra refined lubricant base is used, fortified with shear stable polymeric additives. This helps retain hydraulic efficiency and affords better protection of precision components. These High Viscosity Index (HVI) fluids offer the following benefits:

- Wider useful temperature range
- Very low pour point temperatures and improved cold pumping characteristics
- Superior oxidation control and rust/corrosion protection.
- Very good water separation (demulsibility) and hydrolytic stability
- Excellent foam control and release of entrained air
- Excellent anti-wear protection
- High *dielectric strength

APPLICATIONS:

Gulf Harmony[®] AW Hydraulic Fluid MG are recommended for both high and low pressure hydraulic systems subject to wide temperature fluctuations and where an oil with dielectric (insulating) properties may be required. This includes mobile construction, aerial lift buckets, garbage collecting equipment, tree trimming and fruit picking equipment, marine systems, and hydraulic control systems for machine tools and presses and hydraulic elevators, hoists, and lifts. These products meet the performance requirements for the following applications:

- B F Goodrich 0152
- Cincinnati Machine P-68, P-70, P-69
- Denison HF-0 (Rev. J)
- DIN 51524, Part 3 HVLP
- FMC 40 P0014-C, 40 P0013-C, 83052
- Jeffrey No. 87
- Lee-Norse 100-1
- Poclair Multi-grade Specification
- Racine Model S, variable vol. pump
- Eaton Vickers 1-286-S, M-2950-S
- Swedish SHS Multi-grade
- ISO 11158, Family H (Hydraulic Systems), Type HV

* Once containers are open, the dielectric strength cannot be expected to remain at its original value.

03/17

NU-TIER BRANDS, INC.

UNDER LICENSE FROM GULF OIL LP • TULSA, OK 74133 • Phone 918-550-8026 • www.gulflubricants.net or www.Nu-Tierbrands.com

AVAILABILITY:

Gulf Harmony® AW Hydraulic Fluid MG products are available throughout Gulf's marketing area. Your Gulf representative can provide specific information. Need additional information? Call Gulf @ 1-800-566-GULF (4853) or visit Nu-tierbrands.com.

Gulf Harmony® AW Hydraulic Fluid MG Series

Typical Properties

Product Grade		MG15	MG22	MG32	MG46	MG68	MG100
Product Code	Test Method	334215	334222	334240	334244	334268	334300
Viscosity, cSt @ 40°C	ASTM D 445	15	22	32	46	68	100
Viscosity, cSt @ 100°C	ASTM D 445	4.0	5.1	6.4	8.2	10.1	12.5
Viscosity Index	ASTM D 2270	175	170	157	153	132	120
Oxidation Stability, hrs.	ASTM D 943	5,000+	5,000+	5,000+	5,000+	4,000+	3,000+
Pour Point, °F	ASTM D 97	-58	-56	-48	-48	-32	-30
Flash Point, COC, °F	ASTM D 92	310	370	405	420	430	430
Rust Test, A & B	ASTM 665	pass	pass	pass	pass	pass	pass
Dielectric Strength*, kV	ASTM D 877	>30	>30	>30	>30	n/a	n/a

Typical test data are average values only. Minor variations which do not affect product performance are to be expected in normal manufacturing.

***Note:** Dielectric properties are measured at the point of manufacture (when packaged) at select Gulf manufacturing sites. A reduction in dielectric strength can be expected depending on humidity and particulate contamination. Containers should be kept tightly sealed and stored in a clean, dry environment.

*Dielectric performance applies to original packaged goods only.