



Product Bulletin

GULF HARMONY[®] AW-HD HYDRAULIC FLUIDS *Antiwear Protection for R&O Gear and Circulating Systems*

Gulf Harmony[®] AW-HD Hydraulic Fluids are zinc-containing heavy duty hydraulic / circulating oils formulated with an advanced additive system designed to provide superior protection and performance in hydraulic systems often found in mobile and stationary equipment operating under severe conditions.

Gulf Harmony[®] AW-HD Hydraulic Fluids are suitable for use in a wide variety of both high and low pressure industrial, mobile and marine hydraulic systems utilizing vane, piston, or gear pumps. They provide excellent thermal and oxidation stability to help minimize varnish deposit formation.

FEATURES AND BENEFITS:

- Superior oxidation resistance for extended service life.
- Very good anti-foam performance with low air entrainment.
- Exceptional anti-wear protection to maximize hydraulic system component life.
- Outstanding rust and corrosion protection for all components commonly found in hydraulic pumps and circulating systems.

APPLICATIONS:

Gulf Harmony[®] AW-HD Hydraulic Fluids are recommended for applications requiring **AGMA R&O** gear oil in the applicable viscosity grade. Excellent choice in hydraulic equipment reduction gears where **EP** is **not** required. Other uses could include hydraulic presses, winches, hoists, mobile construction equipment, machine tools, air compressors and circulating systems for gears and bearings.

Typical Properties

ISO Viscosity Grade	Test Method	100	150	220	320
Product Code		334400	334402	334404	334406
AGMA Grade		3	4	5	6
Viscosity, cSt @ 40°C	ASTM D-445	98.5	149.5	210	305
Viscosity, cSt @ 100°C	ASTM D-445	11.5	14.3	18.0	22.6
Viscosity Index	ASTM D-2270	105	93	93	90
Pour Point, °F (°C)	ASTM D-5949	+5 (-15)	+10 (-12)	+10 (-12)	+10 (-12)
Flash Point, °F (°C)	ASTM D-92	480	500	520	530
Rust Test	ASTM D-665 A&B	Pass	Pass	Pass	Pass
Oxidation Stability, hrs.	ASTM D-943	>2000	>1500	>1000	>1000
Foam Stability	ASTM D-892	Pass	Pass	Pass	Pass
API Gravity	ASTM D-1298A	30.5	29.7	28.3	27.6

AVAILABILITY:

Gulf Harmony[®] AW-HD Hydraulic Fluids 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.