



Product Bulletin

Gulf Green NS Hydraulic Oils *No Sheen, Non-Toxic, Anti-Wear*

Product Description

Gulf Green NS Hydraulic Oils are premium quality, anti-wear hydraulic oils designed for use in various mobile and stationary hydraulic equipment, compressors and lifts that operate in environmentally sensitive areas where leaks or spills of hydraulic fluid could result in contamination of the soil or nearby waterways. The zinc free formulation is considered to be non toxic to aquatic life and has been formulated to comply with the U.S. EPA LC-50 testing criteria adopted by the U.S Fish and Wildlife Service for mysidopsis-bahia shrimp, rainbow trout and fathead minnows.

Gulf Green NS Hydraulic Oils are formulated with high purity synthetic and hydrotreated base stocks coupled with an advanced ashless (zinc-free) additive system that provides optimum component protection from wear, rust and corrosion. The unique aromatic-free chemistry incorporated in this environmentally friendly hydraulic oil is ideally suited for applications that require strict compliance with U.S Coast Guard static sheen test requirements.

Gulf Green NS Hydraulic Oils are recommended for use in equipment manufactured by Eaton (Vickers), Denison, Sauer-Danfoss, Bosch-Rexroth, Racine, Oilgear and others.

Gulf Green NS Hydraulic Oils meet the following hydraulic equipment manufacturers' specifications:

- Denison HF-0
- Eaton Vickers M-2950-S and I-286-S
- MAG (formerly Cincinnati Machine) P68 (ISO 32), P-70 (ISO 46) and P-69 (ISO 68)
- GM LS2
- Bosch-Rexroth RD 90220
- Conestoga Pump Test ISO 20763

Gulf Green NS 32, 46, 68 are suitable for use when DIN 51524 Part 2 HLP, ISO 11158, ASTM D6158 and SAE MS 1004 are called for.

Features and Benefits:

- **High Performance** – excellent wear protection for critical system components.
- **Environmentally Friendly / Non-Toxic** – formulated to pass acute aquatic toxicity testing.
- **Inherently Biodegradable**- when compared with conventional AW hydraulic oils.
- **Longer Service Life** – when compared to conventional zinc containing hydraulic oils or vegetable base oils.

Typical Properties

| ISO Viscosity | | 32 | 46 | 68 |
|---|-------------|-----------|-----------|-----------|
| Product Code | Test Method | 334932 | 334946 | 334968 |
| Specific Gravity, 15.6 °C | | 0.85 | 0.86 | 0.87 |
| Density, lb.gal | | 7.05 | 7.14 | 7.22 |
| Viscosity cSt @ 40°C | ASTM D445 | 32 | 46 | 68 |
| Viscosity cSt @ 100°C | ASTM D445 | 5.5 | 6.8 | 8.8 |
| Viscosity Index | ASTM D2270 | 105 | 102 | 100 |
| Color | ASTM D1500 | L1.0 | L1.0 | L1.0 |
| Flash Point, COC, °F (°C) | ASTM D92 | 420 (215) | 425 (218) | 430 (221) |
| Oxidation Life, hrs. to 2.0 Acid No. (est.) | ASTM D943 | 6,000+ | 6,000+ | 6,000+ |
| Pour Point °F (°C) | ASTM D97 | -20 (-28) | -20 (-28) | -20 (28) |
| Four Ball Wear, 40Kg | ASTM D4172 | 0.48 | 0.48 | 0.48 |

AVAILABILITY:

Gulf Green NS Hydraulic Oils 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 www.gulflubricants.net.