

# **Gulf Harmony EF**

## Environmentally friendly, bio-degradable, antiwear hydraulic oil

### **Product Description**

**Gulf Harmony EF, ISO VG 46** is an environmentally friendly fluid specially designed to provide optimum performance in hydraulic and circulation systems working in sensitive applications where there is a possibility of environmental damage due to accidental fluid spill or leakage. It is formulated with special biodegradable vegetable oils and carefully selected additives having low toxicity to meet the stringent requirements of biodegradability without sacrificing the performance requirements of users requiring such hydraulic oils. It possesses good anti-wear property, thermo-oxidative stability, foam control, rust & corrosion protection and water separation properties. It exceeds the performance requirements of ISO 15380 HETG and is approved against Denison HF-6/HF-2 specifications.

#### **Features & Benefits**

- Ready biodegradability and low-toxicity reduces potential for environmental damage in case of accidental spill or leakage
- Superior load carrying capability & anti-wear property protect critical components against wear and prolong equipment life
- Excellent oxidative stability reduces tendency to form sticky deposits and sludge normally associated with vegetable oils
- · Effective corrosion inhibitors protect internal components against corrosive wear
- · Compatible with all common construction metals and sealing materials used in hydraulic systems

#### **Applications**

- Hydraulic systems working in environmentally sensitive areas where spills and leaks should have the least possible
  effect on environment
- Unattended or outdoor equipments in forestry, agriculture, construction & mining and shipping industries requiring oils with ready biodegradability and low-toxicity
- Hydraulic systems requiring Denison HF-6/HF-2 or ISO 15380 HETG quality oils

### Specifications, Approvals & Typical Properties

ISO Viscosity grade		46
Meets the following Specifications		
ISO 15380 HETG, Denison HF-6/HF-2	,	Х
Typical Properties		
Test Parameters	ASTM Method	Test Values
Viscosity @ 40 °C, cSt	D 445	44.1
Viscosity Index	D 2270	191
Flash Point, °C	D 92	> 250
Pour Point, °C	D 97	-24
Density @ 15°C, Kg/l	D 1298	0.917
Rust Test	D 665A/B	Pass
Emulsion Test, 30 minutes max, @ 54 oC	D 1401	Pass
FZG, fail load stage	DIN 51354 Part II	11

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Properties mentioned are typical only and minor variations, which do not affect product performance, are expected to arise in normal manufacturing processes. Please follow equipment manufacturer's recommendations for performance level and viscosity grade. The Safety Data Sheet for this product is available from your nearest Gulf Distributor. Please consult our local representative if any further information is required.