

## Product Data Sheet

## Industrial Gear EP Oils

**Hartland Industrial Gear EP Oils** are premium quality, heavy-duty, extreme pressure (EP) industrial gear oil developed for the lubrication of heavily loaded enclosed gear drives operating under moderate to sever service conditions. It is specially formulated with "clean gear" additive technology to minimize deposit formation and provide excellent gearbox cleanliness. It is recommended for use in all applications where the equipment manufacturer specifies an AGMA EP gear oil.

Hartland Industrial Gear EP Oils are formulated to provide extreme-pressure and antiwear properties, excellent deposit control, protection against rust and corrosion, and resistance to foaming. It has high load-carrying capacity for protection against scuffing and wear. It has excellent oxidation resistance and thermal stability at high temperatures to minimize sludge and varnish formation and provide long service life. It protects gears and bearings against rust and corrosion. It has excellent water-separating properties to minimize the formation of emulsions and is resistant to excessive foam buildup that can interfere with proper lubrication.

#### **APPLICATIONS**

- Enclosed industrial gear drives operating under heavy loads, high peak loads, or intermittent shock loads
- Enclosed spur, bevel, helical, herringbone and planetary gear drives where the equipment manufacturer specifies an AGMA EP gear oil
- Heavily loaded plain and rolling-element bearings

Extra Duty Gear Oil meets the requirements of the following industry specifications:

- ANSI/AGMA Standard 9005-E02, Anti-Scuff/Anti-Wear (EP) Oils
- DIN 51517 Part 3, Lubricating Oils, Type CLP
- Fives Cincinnati P-77 (ISO VG 150), P-74 (ISO VG 220), P-59 (ISO VG 320), P-35 (ISO VG 460) (approved)
- German Steel Industry SEB 181226, Type CLP
- ISO 12925-1, Type L-CKC
- U.S. Steel 224

#### **FEATURES/BENEFITS**

- High load-carrying capacity for protection against scuffing and wear
- Excellent oxidation resistance and thermal stability
- Excellent deposit control for gearbox cleanliness
- Protects against rust and corrosion
- Fast water separation
- Quick foam release
- Effective mist suppression ("M" grades)



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### **Typical Properties**

ISO	68	150	
AGMA No.	2EP	4EP	
Viscosity @ 40° C, cSt	68	150	
Viscosity @100° C, cSt	8.7	14.4	
Viscosity Index	99	93	
Pour Point, °F	-27	-27	
Flash Point, °F	455	469	
Specific Gravity	.876	.884	
Color, ASTM D1500	3.0	4.0	
Copper Corrosion	1a	1a	

Typical Test Data are average values only. Minor variations which do not affect product performance are to be expected during normal manufacturing.