

# Certop<sup>™</sup> F

**Premium Food-Grade Gear and Bearing Oil** FG 90 (ISO 220) and FG 140 (ISO 460)

Food grade gear and bearing oil specifically formulated to solve problems with food-processing equipment

Provides superior protection against water contamination, oxidation, and foaming

### GEAR OIL OF CHOICE FOR ALL H1 GEAR AND BEARING APPLICATIONS

### **Provides Superior Equipment Protection for**

- Utility Plants and Refineries
- Industrial Manufacturing
- Paper Mills & Packaging Plants Food Processing Plants
- •Canning and Bottling Facilities Chemical Plants

Printing

• Plastic and Rubber Plants



**Provides Excellent Wear Protection** 



**Displaces Water for Easy Drainage** 



**Resists Oxidation to Prolong Oil Life** 



Controls Foaming



**Prevents Rust and Corrosion** 









### **Wide Temperature Range**

Certop FG 90 (ISO 220)

-12°C to 135°C Intermittent up to 148°C

Certop FG 140 (ISO 460)

-12°C to 148°C Intermittent up to 176°C

Meets or Exceeds the Following **Performance Requirements** 

 FDA Regulations Part 21 CFR 178.3570



# CERTOP FG contains a total additive package that sets it apart from other gear oils

### **Additives** Benefits

Premium Grade Base Oil	Superior grade, highly-refined base oil resists oxidation and high-temperature	
	breakdown to maintain better lubricity.	
Friction Reducers	Plate out on metal surfaces to prevent friction and wear under heavy loads.	
Anti-Wear Agents	Form a lubricant film on metal surfaces in the presence of heavy loads and high	
	temperatures. Prevents cold welding.	
Oxidation Inhibitors	Extend service life of the lubricant by retarding the oxidation or breakdown	
	process.	
Rust and Corrosion Inhibitors	Block out corrosive elements such as acids, water, condensate and steam by	
	forming a protective barrier on equipment surfaces to prevent chemical wear.	
Demulsifiers	Separate water from oil to keep metal surfaces dry. Allows excess water to be	
	drained from equipment.	
Pour point depressants	Keep oil flowing properly in cold temperature. Lowers frictional drag and	
	keeps equipment running temperatures down to -20 degrees.	
Anti-Foam Agents	Withstand agitation and heat without forming foam conatminants. Reduce	
	pressure levels on seals and vents.	

## PHYSICAL PROPERTIES

	CERTOP FG 90	CERTOP FG 140
Viscosity- SAE	90	140
Viscosity- ISO	220	460
cSt. @ 40°C	202 - 238	422 - 496
cSt @ 100°C	18.5	29
SUS @ 37.7°C	1175	2525
SUS @98.8°C	94	143
Viscosity Index	90	88
API Gravity	30.1	29.3
Pour Point (°C)	-12	-12
Emulsion ASTM D 1401	30	30
% Phosphorous ASTM D 1091	0.02 - 0.04	0.02 - 0.04
Acid Number ASTM D 974	0.65	0.64
Four Ball Wear ASTM D 2266 @ 20 kg	0.3	0.3
@40 kg	0.4	0.4
Rust Test	Pass	Pass

#### **IDEAL FOR USE IN**

Power dividers, oil filled bearings, gear trains and gear boxes including enclosed gears of spur type, hypoid, spiral bevel, worm, herringbone, helical, planetary and unusual combinations of gear types.

### DO NOT USE FOR

Any equipment for which the manufacturer does not recommend this type of gear lubricant. Never mix with asphaltic-type or "SCL"-type lubricants.

