# TECHNICAL DATA SHEET



# **Industrial Gear Oil**

Bel-Ray® Industrial Gear Oils are a series of premium gear lubricants formulated to provide optimum performance and protection in all types of enclosed gear sets. They are blended with selected grades and thermally stable paraffinic base stocks and fortified with an advanced additive system designed to deliver ultimate protection against gear and bearing wear, rust, oxidation, and hydrolytic decomposition.

### **EQUIPMENT BENEFITS**

- Outstanding wear protection to protect critical gear components
- · Excellent resistance to rust and oxidation
- Maintains excellent water separating properties (demulsification), even at elevated operating temperatures

### PRODUCT FEATURES

- Formulated with premium paraffinic base stocks for added resistance to thermal breakdown
- Provides active anti-wear agents to protect critical gear components
- Special oxidation and rust inhibitors, provides resistance to corrosion and system rust
- Extreme pressure additives provide longlasting gear protection
- Chlorine-free formulation provides worry-free disposal
- Non-corrosive to copper, brass, or bronze bearing material

## **APPLICATIONS**

Bel-Ray Industrial Gear Oil meets or exceeds industrial gear oil applications including:

- DIN 51517 Part 3
- GM LS 2 EP Gear Oil
- Clean Panel Coker
- David Brown \$1.53.101
- ISO 12925-1 CKC/CKD
- U.S. Steel 224
- AGMA 905-D94
- AGMA 9005-E02 (replaced AGMA 250.04)
- ISO 68 AGMA 2EP Cincinnati Milacron P-63
- ISO 100 AGMA 3EP Cincinnati Milacron P-76
- ISO 150 AGMA 4EP Cincinnati Milacron P-77
- ISO 220 AGMA 5EP Cincinnati Milacron P-74
- ISO 320 AGMA 6EP Cincinnati Milacron P-59
- ISO 460 AGMA 7EP Cincinnati Milacron P-35

Industrial Gear Oil Typical Physical Properties							
Property	Test Method	68	100	150	220	320	460
API Gravity @ 60°F	D4052	29.5	29.2	28.7	27.8	28.0	29.0
Density@15°C, g/cm <sup>3</sup>	D4052	0.8784	0.8801	0.8828	0.8878	0.8867	0.8811
Viscosity @ 40°C, cSt	D445	68	100	150	220	320	460
Viscosity @ 100°C, cSt	D445	8.8	11.1	14.2	18.5	23.5	29.5
Viscosity Index	D2270	102	96	91	93	92	92
Flash Point, °C (°F)	D93	200 (392)	190 (374)	194 (381)	192 (378)	199 (390)	200 (392)
Pour Point, °C (°F)	D97	-30 (-22)	-33 (-27)	-30 (-22)	-30 (-22)	-9 (-16)	-9 (-16)
FZG	D5182	13	14	14	14	14	14
Timken OK Load	D2782	60	65	65	65	65	65
Phosphorous, wt%	D6481	0.015	0.015	0.015	0.015	0.015	0.015
Sulfur, wt%	D6481	0.42	0.42	0.42	0.42	0.42	0.42
Pounds per Gallon	D1250	7.318	7.332	7.355	7.397	7.387	7.341

Minor variations in typical physical properties may occur from normal manufacturing processes

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Calumet Branded Products, LLC 2780 Waterfront Pkwy. E. Dr., Suite 200 Indianapolis, IN 46214 Technical Services: 317-328-5660

www.belray.com

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