100 Extreme Pressure Gear Oil

PRODUCT DESCRIPTION

Bel-Ray® 100 Extreme Pressure Gear Oil is an excellent extra heavy-duty, enclosed gear oil formulated for all types of gearing. It provides Extreme Pressure and anti-wear properties, excellent demulsibility, and exceeds manufacturers' specifications. 100 Extreme Pressure Gear Oil has a 45-year history of component life extension. It boasts 100-pound Timken OK Load, 12 loading stages of the FZG Test, and 4500 pounds on the Falex EP Test. Grades ISO VG 460 and ISO VG 1000 are certified for Caterpillar SD4721 Part A Specification for dragline enclosed gear case lubricant. Grades ISO VG 150, ISO VG 220 are Bosch Rexroth approved.

100 Extreme Pressure Gear Oil is formulated with paraffinic base oils. It is blended with proprietary advanced generation Extreme Pressure and anti-wear additives and friction modifiers along with corrosion, rust, oxidation and foam inhibitors. 100 Extreme Pressure Gear Oil provides maximum protection in an extremely cost-effective, high-performance gear oil.

PRODUCT FEATURES and BENEFITS

• Friction modifiers	Provides a reduction in energy consumption, operating temperature and noise level.
• Extreme Pressure and anti-wear protection	Maximizes component useful life helping to reduce replacement part costs and lost production time.
• Bright red color	Assists in the detection of oil leaks. Promotes improved housekeeping and worker safety.

APPLICATIONS

- Industrial and process equipment, including enclosed gear cases and circulating systems, where an Extreme Pressure gear oil is recommended or required.
- Mining equipment- draglines, drills and shovels where heavy loads demand a higher viscosity; ISO Grades 680 and 1000 are available.

DISTRIBUTED BY:
Calumet Branded Products, LLC
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www.belray.com

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TECHNICAL DATA SHEET

PRODUCT DATA

Typical Properties							
Property	**Test Method**	**ISO 150**	**ISO 220**	**ISO 320**	**ISO 460**	**ISO 680**	**ISO 1000**
SAE Gear Oil Grade		80W-90	110	85W-140	140	190	250
Formerly AGMA Grade		4	5	6	7	8	8A
Viscosity @ 40°C (cSt)	ASTM D445	137	222	321	445	688	984
Viscosity @ 100°C (cSt)	ASTM D445	14.1	19.2	24.4	29.7	36.5	47.7
Viscosity Index	ASTM D2270	100	98	97	95	87	92
Pour Point, °C (°F)	ASTM D97	-30 (-22)	-21 (-5)	-24 (-10)	-8 (18)	-4 (25)	0 (32)
Copper Corrosion, 3 h @ 100°C (Rating)	ASTM D130	1b	1b	1b	1b	1b	1b
Rust Preventation	ASTM D665A&B	Pass	Pass	Pass	Pass	Pass	Pass
Demulsibility, 1 hour, oil/water/emulsion, (mL/mL/mL)	ASTM D1401	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0
Foam Test, Sequence I, Tendency/Stability (mL/mL)	ASTM D892	Nil	Nil	Nil	Nil	Nil	Nil
Foam Test, Sequence II, Tendency/Stability (mL/mL)	ASTM D892	Nil	Nil	Nil	Nil	Nil	Nil
Foam Test, Sequence III, Tendency/Stability (mL/mL)	ASTM D892	Nil	Nil	Nil	Nil	Nil	Nil
Falex Pin & Vee Block Test Method A, non seizure load (lbf)	ASTM D3233	4500	4500	4500	4500	4500	4500
Falex Pin & Vee Block Test Method B, non seizure load (lbf)	ASTM D3233	3500	3500	3500	3500	3500	3500
4-Ball EP Test, Weld Load (kgf)	ASTM D2783	400	400	400	400	400	400
4-Ball EP Test, Load-Wear Index (kgf)	ASTM D2783	64	66	68	69	73	75
Timken EP Test, OK Load (lbs)	ASTM D2782	45.4 (100)	45.4 (100)	45.4 (100)	45.4 (100)	45.4 (100)	45.4 (100)
FZG (Fail Stage)	ASTM D5182	12+	12+	12+	12+	12+	12+
Color		Red	Red	Red	Red	Red	Red

HEALTH and SAFETY

Health and safety recommendations for products can be found on the Safety Data Sheet (SDS) at www.belray.com

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