



Bel-Ray Company, Inc.

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BEL-RAY SYNTHETIC GEAR OIL

Bel-Ray Synthetic Gear Oil is a high performance gear lubricant for demanding mining and industrial applications. The inherent thermal stability of the product's synthetic base fluids and complete range of ISO Viscosity Grades makes it useful across a very wide temperature range.

Applications

- ◆ Dragline, shovel and heavy process gear cases
- ◆ Planetary transmissions
- ◆ Electric wheel motors
- ◆ Compliances: U.S. Steel 224, AGMA 9005-D94, DIN 51517 Part 3
- ◆ Approvals: A. Friedr. Flender GmbH (ISO VG 220 and higher)

Features and Benefits

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| ◆ PAO and ester based | State-of-the-art low traction base fluids promote friction and temperature control and reduced wear for extended component life. |
| ◆ Controls micropitting | Prevents minor tooth surface damage (micropitting or gray staining) that can lead to catastrophic gear damage. |
| ◆ Highly filterable | Clean fluid promotes longer component and fluid life for reduced cost of ownership. |
| ◆ Anti-Wear and Extreme Pressure properties | Reduces wear to maximize component useful life helping to reduce replacement parts costs and lost production time. |

General Description

Bel-Ray Synthetic Gear Oil is a full synthetic Extreme Pressure gear lubricant. **Bel-Ray Synthetic Gear Oil** utilizes proprietary ester and synthetic hydrocarbon technology for improved protection of gears and bearings. **Bel-Ray Synthetic Gear Oil** is compounded to provide DIN 51517 Part 3 and AGMA 9005-D94 levels of performance while meeting or exceeding Flender AG, David Brown Gear and many other OEM requirements.

Product No. 6688, 6690, 6692, 6694, 6696, 6698

BEL-RAY SYNTHETIC GEAR OIL

TYPICAL PROPERTIES

<u>Product No.</u>	<u>6688</u>	<u>6690</u>	<u>6692</u>	<u>6694</u>	<u>6696</u>	<u>6698</u>
ISO Grade	150	220	320	460	680	1000
SAE Grade	90	140	140	250	250	250
AGMA Number	4S	5S	6S	7S	8S	n/a
Viscosity, ASTM D445						
@ 40°C, cSt	153.0	235.7	306.9	459.0	682.9	949
@ 100°C, cSt	20.9	28.9	35.6	47.6	65.0	88.8
Viscosity Index, ASTM D2270	160	161	163	162	167	180
Pour Point, ASTM D97						
°C	-51	-48	-46	-48	-42	-39
(°F)	-60	-54	-51	-54	-44	-38
Copper Strip Corrosion, ASTM D130						
3 hrs @ 121°C, rating	1b	1b	1b	1b	1b	1b
Rust Test, ASTM D665						
Procedure A&B	Pass	Pass	Pass	Pass	Pass	Pass
4-Ball Wear Test, ASTM D4172						
@ 1200 rpm, 40 kg, 1 hr, 75°C						
Scar diameter, mm	0.313	0.304	0.313	0.334	0.313	0.315
Timken EP Test, ASTM D2782						
OK Load, kg	45.4	45.4	45.4	45.4	45.4	45.4
(lb)	(100)	(100)	(100)	(100)	(100)	(100)