

# SYNTHETIC GBC Gear, Bearing and Compressor Oils

## **Description**

**Synthetic Gear, Bearing and Compressor (GBC) Oils** are high quality rust and oxidation inhibited synthetic oils fortified with ashless, non-zinc antiwear and mild EP additives for excellent gear and bearing protection.

**Synthetic Gear, Bearing and Compressor Oils** protect against rust, corrosion, and deposit formation. They are highly resistant to oxidation and minimize sludge and varnish formation for dependable and durable service.

**Synthetic Gear, Bearing and Compressor Oils** are designed for superior performance in a wide variety of industrial applications including hydraulics, compressors, circulating systems, pumps and helical spur or worm gearboxes where appropriate.

## Features/Benefits

- ✓ Anti-wear and Mild EP Additives Extend Equipment Life
- ✓ Excellent Cold Flow Properties
- √ Thermally Stable
- ✓ Excellent Deposit Control
- ✓ Excellent Demulsibility
- ✓ Non-corrosive to Yellow Metals

#### **Specifications:**

THRIVE Synthetic GBC Oils are designed for use in equipment calling for:

AGMA 9005-E02 (R&O) - All Grades DIN 51517 Part 3 - ISO 150 through 460 ISO 12925-1 (CKT) - ISO 150 through

Cincinnati Machine P-39 (worm) – ISO 460

**Physical, Chemical & Performance Properties** 

<b>Product Number</b>	541	542	543	544	545	546	547	548
ISO Viscosity Grade	32	46	68	100	150	220	320	460
Viscosity @ 100°C cSt	6.2	7.3	10.5	13.5	21.2	29	39.8	52.1
Viscosity @ 40°C cSt	33.6	42.9	68.7	100.0	156.9	230.2	333.0	471.1
Viscosity Index	136	135	139	135	159	165	172	174
Density (lb/gal)	6.99	7.00	7.05	7.12	7.07	7.09	7.10	7.24
Flash Point °C (°F)	264	252	252	262	274	280	272	284
	(507)	(486)	(486)	(504)	(525)	(536)	(522)	(543)
Fire Point °C (°F)	276	274	276	274	302	302	300	302
	(529)	(525)	(529)	(525)	(576)	(576)	(572)	(576)
Pour Point °C (°F)	-53	-48	-40	-40	-42	-40	-39	-37
	(-63)	(-54)	(-40)	(-40)	(-44)	(-40)	(-38)	(-35)
Foam Tendency	0/0/0	0/0/0	0/0/0	0/0/0	0/15/0	0/15/0	0/10/0	0/15/0
Copper Corrosion	1A	1A	1A	1A	1A	1A	1A	1A
FZG Failure Stage (A/16.6/90)	11	11	11	11	-	-	-	-
FZG Failure Stage (A/8.3/90)	-	-	-	-	>12	>12	>12	>12







### **Application Recommendations**

#### **Compressors**

Use the appropriate viscosity grade in single and multi-stage rotary screw, vane and reciprocating compressor crankcases and cylinders, vacuum pumps and other compressor applications. **Synthetic Gear, Bearing and Compressor Oils** are recommended for use up to 8,000 hours or more if the oil is determined to be suitable for continued use by oil analysis.

The service life is dependent on operating conditions and maintenance practices. Oil analysis is recommended every 1,000 hours of operation. **Synthetic Gear, Bearing and Compressor Oils** are compatible with petroleum oils, most synthetic oils and most seals, paints, plastics and materials commonly used in compressors.

**Synthetic Gear, Bearing and Compressor Oils** are not compatible with synthetic silicon (Sullair 24Kt) or polyglycol (PAG) fluids such as Ingersoll-Rand SSR Ultra Coolant and Sullube 32. Polycarbonate bowls should be metal covered.

**Synthetic Gear, Bearing and Compressor Oils** are not recommended for "breathing air" or refrigeration compressors.

#### Gears

Synthetic Gear, Bearing and Compressor Oils are compatible with petroleum oils, most synthetics oils and most seals, paints, plastics and materials commonly used in enclosed industrial gear sets. Synthetic Gear, Bearing and Compressor Oils are not compatible with synthetic polyglycol (PAG) gear oils. Higher viscosity grades ISO 320 and ISO 460 are commonly used for worm gears. While Synthetic Gear, Bearing and Compressor Oils provide excellent anti-wear and mild EP protection, they are not full extreme pressure (EP) fortified gear oils. For high EP gear oils, refer to U.S. Lubricants' full line of Synthetic Extreme Pressure (EP) Industrial Gear Oils.

