



PRODUCT DATA SHEET



SYNTHETIC ESTER COMPRESSOR OIL

Synthetic Ester Compressor Oil, commonly known as Bel-Ray DEB Compressor Lubricant, is a high performance, heavy-duty, synthetic, diester-based compressor oil. **Synthetic Ester Compressor Oil** offers high deposit solvency and will eliminate deposits formed by conventional compressor oils. **Synthetic Ester Compressor Oil** will also prevent the formation of new deposits. The proprietary rust and oxidation inhibitors utilized in **Synthetic Ester Compressor Oil** allow for extended drain intervals and extended component life.

Applications

- ◆ Rotary vane and screw type compressors
- ◆ Reciprocating compressors
- ◆ Gears, bearings, hydraulic and chain applications operating at low temperatures
- ◆ Airline lubricant, tools, valves, cylinders, etc.

Features and Benefits

- | | |
|-------------------------------|--|
| ◆ Wide temperature range | High flash and fire points, along with very low pour point. |
| ◆ USDA H2 rated | Acceptable in food plants where there is no possibility of food contact. |
| ◆ Low sludge forming tendency | High solvency for deposits. Keeps compressor parts clean. |
| ◆ Anti-wear performance | Reduces friction and wear. Lowers energy costs. |
| ◆ High demulsibility | Excellent water separability. |

General Description

Synthetic Ester Compressor Oil is a synthetic diester-based compressor oil. **Synthetic Ester Compressor Oil** reduces compressor maintenance due to its high solvency for deposits. In addition, **Synthetic Ester Compressor Oil** has excellent anti-wear properties, rust protection, exceptional water separability characteristics, and anti-foaming additives. **Synthetic Ester Compressor Oil** is recommended for rotary screw, rotary vane, and reciprocating compressors. Manufacturer recommendations vary, although generally, grades 32, 46, and 68 are most commonly used for rotary compressors, while grades 100 and 150 are preferred for reciprocating compressors. **Synthetic Ester Compressor Oil** is USDA H2 rated, making this product acceptable as a lubricant in plants where there is no possibility of food contact in plants operating under the U.S. Federal Meat and Poultry Products Inspection Program.

Product No. 58140, 58150, 58160, 58180, 58200

SYNTHETIC ESTER COMPRESSOR OIL

TYPICAL PROPERTIES

<u>Product No.</u>	<u>58140</u>	<u>58150</u>	<u>58160</u>	<u>58180</u>	<u>58200</u>
ISO Viscosity Grade	32	46	68	100	150
Viscosity, ASTM D445					
@ 40°C, cSt	31.2	46.1	67.5	99.5	144
@ 100°C, cSt	5.93	7.22	8.84	11.0	13.6
Viscosity Index, ASTM D2270	138	117	104	95	88
Pour Point, ASTM D97					
°C	-57	-51	-46	-26	-23
(°F)	(-71)	(-60)	(-51)	(-15)	(-10)
Copper Strip Corrosion, ASTM D130					
3 hrs @ 100°C, rating	1a	1a	1a	1a	1a
Foam Test, ASTM D892					
Sequence I, ml/ml	0/0	0/0	0/0	0/0	0/0
Sequence II, ml/ml	10/0	10/0	10/0	10/0	10/0
Sequence III, ml/ml	0/0	0/0	0/0	0/0	0/0
Oxidation Lifetime, ASTM D943, hrs	>3500	>3500	>3500	>3500	>3500
4-Ball Wear Test, ASTM D4172					
@ 1200 rpm, 40 kg, 1 hr, 75°C					
Scar diameter, mm	0.46	0.46	0.46	0.46	0.46
Vickers V-104C Vane Pump Test, ASTM D2882					
Ring & Vane Weight Loss, mg	<50	<50	<50	<50	<50
FZG Visual Test, ASTM D5182					
Damaged Load Stage	11	12	12	12	12
Flash Point, ASTM D92					
°C	232	244	250	262	270
(°F)	(450)	(471)	(482)	(504)	(518)
Rust Test, ASTM D665, Procedure A & B	Pass	Pass	Pass	Pass	Pass
Conradson Carbon Residue, ASTM D189					
Weight %	0.019	0.019	0.019	0.020	0.024
Biodegradability, ASTM D5864 (OECD 301B), %	67.6	--	59.1	--	--
Color	Yellow	Yellow	Yellow	Yellow	Yellow