

**RCD SERIES**  
SYNTHETIC AIR COMPRESSOR OIL  
No. FS-604

ISO: 32, 46, 68, 100, 125, 150

**DESCRIPTION:**

**RCD SERIES** synthetic lubricants are unique combinations of quality diester base stocks and the latest additive technology. Frontier provides a wide range of **RCD** lubricants that cover applications for rotary vane, rotary screw, and all ages and design types of reciprocating compressors. **RCD** synthetic is a superior quality ashless, high performance compressor lubricant blended from extremely high VI synthetic base oils and specially selected additives. Compared to compressor oils made with petroleum base stocks, **RCD** provides higher thermal stability and a higher viscosity index. This lubricant can be used in a wide variety of compressor applications. This includes reciprocating, rotary vane and screw type compressors. The combination of synthetic base oils, special ashless friction reducing and anti-oxidation additives make this an extremely long life lubricant.

**PERFORMANCE CHARACTERISTICS:**

- **Oxidation resistant**  
Oxidation inhibitors and premium quality diester base stocks combine to form a product with outstanding resistance to oxidation. This feature is designed for long drain intervals and for minimizing the formation of sludge and varnish.
- **Provides excellent anti-wear protection**  
Special ashless anti-wear additives form a chemical layer between metal surfaces to reduce wear.
- **Friction reduction**  
Exclusive friction reducing additives provide reduced operating temperature and reduced horsepower requirements in comparison to conventional compressor oils.
- **Reduces operating temperature**  
Better thermal conductivity reduces varnish and carbon deposit forming tendencies for cleaner, cooler operation.
- **More energy efficiency**  
Approximately 20% lower coefficient of friction
- **Superior rust protection**  
Inhibitors protect metal parts from moisture during operation and shut down.
- **Demulsibility**  
Designed to separate rapidly from water for better filter life and rust and corrosion protection.
- **High viscosity index**  
Resists viscosity changes at both low and high temperature extremes

**TYPICAL APPLICATIONS:**

**RCD Series Lubricants** are designed for use in the crankcase and as a cylinder lubricant.

**RCD-32** is recommended for use in the following applications:

- Centrifugal Compressors
- Certain rotary screw & vane compressors
- Low temperature lubrication
- High temperature lubrication
- General lubrication requiring an ISO 32 lubricant

**RCD 46 & 68** are recommended for use in:

- Rotary screw and vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- Mist lubrication systems
- General lubrication requiring an ISO 68 lubricant

**RCD-100** is recommended for use in:

- Reciprocating compressors
- Rotary vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- General lubrication requiring an ISO 100 lubricant

**RCD-125 and 150** are recommended for use in:

- Reciprocating compressors
- Rotary vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- General lubrication requiring an ISO 150 lubricant

**RCD Lubricants** are compatible with almost all elastomers used in compressors and pumps, including paint used in crankcases. The following materials are compatible for use with them:

- High Nitrile Rubber (Buna N, NBR-greater than 36% Acrylonitrile),
- Medium Nitrile Rubber (Buna N, NBR 30-36% Acrylonitrile), Teflon®,
- Epoxy Paint, Oil Resistant Alkyd, Celcon, Viton®, and Nylon.

**TYPICAL SPECIFICATIONS:**

<b>ISO Viscosity Grade</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>	<b>125</b>	<b>150</b>
Viscosity:						
@ 40°C, cSt	30.5	42.0	64.0	97.0	125	154
@ 100°C, cSt	4.90	5.74	8.30	10.8	13.3	15.5
Viscosity Index	73	66	97	94	103	101
Specific Gravity	0.941	0.965	0.964	0.961	0.957	0.956
Density lbs/gal	7.837	8.037	8.037	8.008	7.975	7.962
Pour Point, °F	-65	-65	-40	-30	-38	-30
(°C)	(-54)	(-54)	(-40)	(-30)	(-38)	(-34)
Flash Point, °F	490	475	490	495	495	505
(°C)	(254)	(246)	(254)	(257)	(257)	(263)
Autoignition Point, °F	765	720	765	780	785	785
(°C)	(407)	(373)	(407)	(416)	(418)	(418)
Copper Corrosion	1A	1A	1A	1A	1A	1A

RCD-125 falls between the ISO-100 and ISO 150 viscosity range.

Typical test data are average values only

**PERFORMANCE PRODUCTS GUARANTEED**

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