

# FS Synthetic R&O Gear, Bearing, & Compressor Oil

## Description

Full synthetic oil engineered to provide excellent wear protection and long oil life in a wide range of industrial applications.

## Features and Benefits:

- Versatility allows for product consolidation
- Mild EP performance delivers excellent protection for high- and low-speed gears and bearings
- Protects at high temperatures while providing excellent cold-temperature start-up efficiency and lubrication
- Maintains gear and bearing cleanliness
- Designed to reduce leaks and extend seal life
- Resists foam for reliable protection
- Non-corrosive to copper (yellow metals)
- Resists oxidation to help increase oil life

## Meets or Exceeds:

- **AGMA 9005-E02 (R&O):** 32, 46, 68, 100, 150, 220, 320, 460, 680
- **DIN 51517 Part 3:** 150, 220, 320, 460, 680
- **ISO 12925-1 (CKT):** 150, 220, 320, 460, 680
- **Cincinnati Machine P-39 (worm):** 460, 680

\*worm gear

## Product Availability:

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 32			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	217021	265-gal. Tank	*
55-gal. Drum	235453		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 46			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	197927	265-gal. Tank	*
55-gal. Drum	190231		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 68			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	189719	265-gal. Tank	232540
55-gal. Drum	188030		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 100			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	187614	265-gal. Tank	*
55-gal. Drum	187996		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 150			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	188421	265-gal. Tank	227242
55-gal. Drum	197865		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 220			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	193188	265-gal. Tank	197588
55-gal. Drum	197587		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 320			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	188420	265-gal. Tank	*
55-gal. Drum	217234		

FS SYNTHETIC R&O GEAR, BEARING & COMPRESSOR OIL 460			
Package Size	Item Number	Package Size	Item Number
5 Gal. Pail	190248	265-gal. Tank	*
55-gal. Drum	197866		

\*Check price pages for item number.



## Typical Properties:

Test / Description	Spec.								
<b>ISO VG ASTM D2422</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>	<b>150</b>	<b>220</b>	<b>320</b>	<b>460</b>	<b>680</b>
<b>Viscosity @ 100 °C, cSt ASTM D445</b>	6.2	7.3	10.5	13.5	19.7	26.5	35.2	47	70.6
<b>Viscosity @ 100°C, cSt ASTM D445</b>	33.6	42.9	68.7	100.0	151.2	222	321.7	456	672.4
<b>Viscosity Index ASTM D2270</b>	136	135	139	135	150	153	155	161	182
<b>Specific Gravity (g/ml) ASTM D1298</b>	0.8393	0.8408	0.8468	0.8550	0.8597	0.8633	0.8665	0.8708	0.8623
<b>Density (lb/gal) ASTM D1298</b>	6.989	7.001	7.051	7.119	7.158	7.189	7.215	7.251	7.18
<b>Color ASTM D1500</b>	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5
<b>Flash Point, °C (°F) (COC) ASTM D92</b>	264 (507)	252 (486)	252 (486)	262 (504)	284 (543)	280 (536)	290 (554)	290 (554)	290 (554)
<b>Fire Point °C (°F) (COC) ASTM D92</b>	276 (529)	274 (525)	276 (529)	274 (525)	302 (576)	302 (576)	312 (594)	314 (597)	320 (608)
<b>Pour Point, °C (°F) ASTM D97</b>	-53 (-63)	-48 (-54)	-40 (-40)	-40 (-40)	-44 (-47)	-40 (-40)	-40 (-40)	-37 (-35)	-37 (-35)
<b>Four Ball Wear Test, mm scar D4172 75°C, 1200rpm, 40kg, 1hr</b>	0.45	0.45	0.45	0.45	0.36	0.36	0.36	0.36	0.36
<b>Total Acid Number (TAN) ASTM D665</b>	0.27	0.27	0.27	0.27	0.21	0.21	0.21	0.21	0.21

**Typical Properties Continued:**

<b>Test / Description</b>	<b>Spec.</b>								
<b>ISO VG ASTM D2422</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>	<b>150</b>	<b>220</b>	<b>320</b>	<b>460</b>	<b>680</b>
<b>Foam Tendency ASTM D892</b>	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
<b>SEQ I (ml)</b>	0/0	0/0	0/0	0/0	5/0	20/0	10/0	20/0	10/0
<b>SEQ II (ml)</b>	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
<b>SEQ III (ml)</b>									
<b>Copper Corrosion, 121°C, 3hr*, ASTM D130</b>	1A	1A	1A	1A	1A	1A	1A	1A	1A
<b>Demulsibility ASTM D1401</b>	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)	40-40-0 (10)	40-40-0 (15)	40-40-0 (20)	40-40-0 (20)	40-40-0 (20)
<b>FZG Failure A/16.6/90</b>	11	11	11	11	-	-	-	-	-
<b>FZG Failure A/8.3/90</b>	-	-	-	-	>12	>12	>12	>12	>12