

# COMPRESYN<sup>®</sup> 405 SERIES

## Food-Grade 100% Synthetic Compressor Oil

### Product Description

COMPRESYN<sup>®</sup> 405 Series compressor oils are made from high quality, shear-stable 100% synthetic USDA H1 authorized base oils. COMPRESYN<sup>®</sup> 405 Series oils provide long compressor life through reduced component wear, corrosion protection, water resistance and lubricant breakdown resistance. COMPRESYN<sup>®</sup> 405 Series oils reduce maintenance costs by extending drain intervals and lowering labor and used-product disposal requirements.

### Synthetic Base Oil Technology

COMPRESYN<sup>®</sup> 405 Series compressor oils' synergistic blend of 100% synthetic base oils with the most advanced food-grade allowable additive technology results in fluids of unparalleled lubricating performance. The high viscosity indices, low pour points, low volatility and prolonged thermal stability allow for use in a wide operating temperature range. These oils minimize carbon buildup, provide clean performance and exhibit low frictional characteristics. These superior formulations have demonstrated increased operational efficiency, reduced energy consumption and lower operating temperatures.

### Compressor Oil Additives — Performance Driven

The antifoam agents stop unwanted foaming and air entrainment. Corrosion inhibitors prevent rust and corrosion caused by water and process contaminants, and oxidation inhibitors extend lubricant life and prevent carbon formation. COMPRESYN<sup>®</sup> 405 Series is fortified with premium USDA H1-authorized ashless, non-detergent additives that are for compressor applications where critical incidental food-contact protection is mandated. COMPRESYN<sup>®</sup> 405 Series compressor oils increase compressor serviceability and lengthen compressor component life.

### Stable in the Presence of Water

COMPRESYN<sup>®</sup> 405 Series compressor oils exhibit very good hydrolytic stability and readily separate from water. This prevents acid formation and unwanted oil/water emulsions. These features allow water to be easily drained from the sump and extend the life of the lubricant.

### Safety Advantage

COMPRESYN<sup>®</sup> 405 Series compressor oils have higher flash, fire and auto-ignition points than competitive petroleum oils\*. Also, their resistance to carbon formation and the ashless additive system minimize the incidence of deposits as ignition-promoting hot spots.

### Application Recommendation

The manufacturer's recommended viscosity grade of COMPRESYN 405 Series is recommended for use in single and multistage rotary screw, vane, centrifugal and reciprocating compressor crankcases and cylinders, vacuum pumps and other compressor applications. In addition, the correct viscosity may be used in light-duty gear and bearing applications, blowers, pumps and hand-held pneumatic tools.

COMPRESYN<sup>®</sup> 405 Series compressor oils are recommended for use in a wide temperature range, from 20°F above the pour point to 220°F (104°C) discharge temperature.

COMPRESYN<sup>®</sup> 405 Series may be used up to 6,000 hours for many compressor applications\*\*, subject to operating conditions and maintenance practices. Monitoring by oil analysis at 500-hour intervals is recommended.

COMPRESYN<sup>®</sup> 405 Series compressor oils are compatible with petroleum oils, most synthetic oils\*\*\*, and almost all seals, paints and materials commonly used in compressors. It is suggested that the compressor be thoroughly drained and cleaned if warranted, and the filter be changed prior to filling with the new lubricant. Cleaning should be done in accordance with manufacturer's recommendations.

\* Although COMPRESYN<sup>®</sup> 405 Series compressor oils have high fire points, they cannot be considered nonflammable.

\*\* Where discharge temperature exceeds 205°F (96°C), lubricant life expectancy is reduced.

\*\*\* Not compatible with silicone or polyglycol fluids such as Sullair 24KT<sup>®</sup>, Sullube 32<sup>®</sup> and Ingersoll-Rand SSR Ultra Coolant<sup>®</sup>.

## Typical Data

## COMPRESYN<sup>®</sup> 405 SERIES

Property	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150	ISO 220	Method
Viscosity @ 40°C, cSt	31.2	46.5	68.5	103.3	149.7	227.4	ASTM D 445
Viscosity @ 100°C, cSt	6.04	7.70	10.5	14.0	18.3	24.3	ASTM D 445
Viscosity Index	144	133	141	137	137	134	ASTM D 2270
ISO Viscosity Grade	32	46	68	100	150	220	ASTM D 2422
Specific Gravity	0.8328	0.8378	0.8368	0.8448	0.8468	.8519	ASTM D 1298
Pour Point, °F (°C)	-65 (-54)	-44 (-42)	-44 (-42)	-44 (-42)	-40 (-40)	-29 (-34)	ASTM D 97
Flash Point, °F (°C)	424 (218)	464 (240)	475 (246)	464 (240)	482 (250)	464 (240)	ASTM D 92
Fire Point, °F (°C)	500 (260)	504 (262)	561 (294)	573 (300)	586 (308)	518 (270)	ASTM D 92
Copper Strip Corrosion	1a	1a	1a	1a	1a	1a	ASTM D 130
Rust Prevent Characteristics							ASTM D 665
Method A Distilled Water	Pass	Pass	Pass	Pass	Pass	Pass	
Method B Syn. Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	
Foaming Characteristics							ASTM D 892
Sequence I	0/0 (10 s)	5/0 (10 s)	0/0 (10 s)	0/0 (10 s)	8/0 (20 s)	8/0	
Sequence II	2/0 (10 s)	3/0 (10 s)	0/0 (10 s)	2/0 (20 s)	2/0 (20 s)	8/0	
Sequence III	0/0 (10 s)	0/0 (10 s)	1/0 (10 s)	0/0 (10 s)	0/0 (10 s)	6/0	
Water Separability	40-40-0 (15)	40-40-0 (15)	40-40-0 (15)	40-40-0 (15)	40-40-0 (15)	40-40-0 (20)	ASTM D 1401
Four-Ball Wear, mm	0.45	0.45	0.45	0.40	0.40	0.40	ASTM D 4172
AGMA Classification	0S	1S	2S	3S	4S	5S	
Color	Water white						
Micronox <sup>®</sup> Technology	Yes	Yes	Yes	Yes	Yes	Yes	
NSF Reg./Category Code	144172/H1	144173/H1	144174/H1	144175/H1	144176/H1	144177/H1	

## Performance Features:

- Antifoam and Antiwear Protection
- Rust and Oxidation Inhibited
- Suitable for Use in Rotary Screw, Vane, Centrifugal and Reciprocating Compressors
- Combines Advantages of USDA H1 PAO Base Oils and USDA H1-Authorized Performance Additives
- Excellent Compressor Component Compatibility
- Excellent Water Demulsibility

## Micronox<sup>®</sup> Technology

COMPRESYN<sup>®</sup> 405 Series fluids contain the performance benefits of Micronox<sup>®</sup> Technology that provides antimicrobial protection to the lubricant. A first in food-grade lubricants, Micronox<sup>®</sup> has proven effective in protecting the lubricant against microbial contamination over extended lubrication intervals and is NSF-registered HX1 (Ingredients for use in H1 Lubricants).

Part Numbers	ISO 32	ISO 46	ISO 68	ISO 100	ISO 150	ISO 220
275 Gal Tote	CS405H-275	CS405J--275	CS405K-275	CS405L--275	CS405M-275	CS405N-275
55 Gal Drum	CS405H-055	CS405J-055	CS405K-055	CS405L-055	CS405M-055	CS405N-055
16 Gal Keg	CS405H-016	CS405J-016	CS405K-016	CS405L-016	CS405M-016	CS405N-016
5 Gal Pail	CS405H-005	CS405J005	CS405K-005	CS405L-005	CS405M-005	CS405N-005
4-1 Gal Case	CS405H-004	CS405J004	CS405K-004	CS405L-004	CS405M-004	CS405N-004
Bulk	CS405H	CS405J	CS405K	CS405L	CS405M	CS405N