

# PETRONAS COMPRESSOR R SYN FG SERIES

## Supreme Performance (PAO) Industrial Refrigeration Compressor Oil

PETRONAS Compressor R SYN FG Series are supreme performance compressor oils specially developed for use refrigeration compressors using ammonia or process gas in food processing plants where there is chance of incidental food contact with the oil.

Formulated with high viscosity index Polyalphaolefin (PAO) synthetic base oils enhanced with advanced pour point depressant, anti-oxidant, anti-rust and anti-foam additives, PETRONAS Compressor R SYN FG oils provide excellent varnish and deposits control, very low pour point and excellent thermal and oxidation stability for up to 3x longer lasting performance vs conventional mineral refrigeration compressor oils.

PETRONAS Compressor R SYN FG Series meets or exceeds key industrial specifications.

### Applications

PETRONAS Compressor R SYN FG Series are recommended for use in:

- ammonia compressors with evaporator temperatures as low as -39°C or applications where food grade products are necessary
- process gas rotary screw and reciprocating compressors

Note: PETRONAS Compressor R SYN FG Series are compatible with mineral compressor oils.

### Features and Benefits

| Features                                  | Benefits  |
|---|---|
| Food grade                                | Can be used in food processing facilities   |
| Excellent varnish and deposits control    | Maintains excellent internal surface cleanliness, controls varnish formation providing longer equipment life  |
| Excellent thermal and oxidation stability | Maintains performance levels under high temperatures and pressure, enabling long oil drain intervals  |
| Very low pour point                       | Avoids deposits formation in the evaporator   |
| Excellent Low Volatility                  | Reduces maintenance and oil consumption   |
| Excellent rust & corrosion protection     | Inhibits the corrosion process that occurs in presence of water, improving equipment life   |
| Very good anti-wear protection            | Protects equipment components from excessive wear and provides longer equipment life  |
| High air release and foam stability       | Maintains excellent efficiency in compressors and ensures smooth operation of the system thanks to fast air release. Protects the system from air degenerative effects reducing maintenance costs |
| Excellent water separability              | Due to excellent water separability the system is protected from water degenerative effects, maintaining system efficiency at required level and reducing maintenance costs                       |



PETRONAS

Technical Data Sheet  
Version 2.0\_17.07.2017

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| Features   | Benefits  |
|--|---|
| High multi metal compatibility                   | Compatible with most metal alloys ensuring trouble free performance of the system                         |
| High compatibility with most seal and elastomers | Compatible with most seals and elastomers, which prevents oil leaks and contamination due to seal erosion |

## Typical Properties

| Characteristic                    | Method     | Specification | 68    |
|-----------------------------------|------------|---------------|-------|
| Specific Gravity @ 15 °C          | ASTM D4052 | (1)           | 0,844 |
| Kinematic Viscosity at 40°C, cSt  | ASTM D445  | (1)           | 68    |
| Kinematic Viscosity at 100°C, cSt | ASTM D445  | (1)           | 10,2  |
| Viscosity Index, min              | ASTM D2270 | (1)           | 135   |
| Flash Point                       | ASTM D92   | (1)           | 268   |
| Pour Point, max °C                | ASTM D97   | (1)           | -54   |

All technical data is provided for reference only / (1): not required in specification / SS is available upon request including quality control limits

## Performance Levels

- ISO 6743-3: DRA
- NSF Category H1 Registration number 155891

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### Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: [www.pli-petronas.com](http://www.pli-petronas.com)

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