

# PETRONAS COMPRESSOR R SYN POE SERIES

## Supreme Performance (POE) Industrial Refrigeration Compressor Oil

PETRONAS Compressor R SYN POE Series are supreme performance compressor oils specially developed for use in refrigeration and air-conditioning compressors using HFC refrigerants. Formulated with high viscosity index Polyol Ester (POE) synthetic base oils enhanced with advanced pour point depressant, anti-oxidant, anti-rust and anti-foam additives, PETRONAS Compressor R SYN POE oils provide excellent varnish and deposits control, very low pour point and excellent thermal and oxidation stability for up to 5x longer lasting performance vs conventional mineral refrigeration compressor oils.

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

### Applications

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

- refrigeration and air-conditioning compressors using HFC refrigerants
- household refrigerators and freezers using HFC refrigerants

### Features and Benefits

Features	Benefits
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
High multi metal compatibility	Compatible with most metal alloys ensuring trouble free performance of the system

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## Typical Properties

Characteristic	Method	Specification	22	32	46
Specific Gravity @ 15 °C	ASTM D4052	(1)	0,998	0,984	0,991
Kinematic Viscosity at 40°C, cSt	ASTM D445	(1)	22	32	46
Kinematic Viscosity at 100°C, cSt	ASTM D445	(1)	4,6	5,9	7,3
Viscosity Index, min	ASTM D2270	(1)	127	130	121
Flash Point	ASTM D92	(1)	260	260	260
Pour Point, max °C	ASTM D97	(1)	-57	-54	-48
TAN, mgKOH/g	ASTM D664	(1)	0,02	0,02	0,02
Miscibility (Low °C) 10% Lube in R134a	-	(1)	-43	-43	-34
Miscibility (High °C) 10% Lube in R134a	-	(1)	>80	>80	>80
Hydroxyl Value, mgKOH/g	ASTM E326	(1)	4	4	4
Characteristic	Method	Specification	68	100	220
Specific Gravity @ 15 °C	ASTM D4052	(1)	0,981	0,973	0,979
Kinematic Viscosity at 40°C, cSt	ASTM D445	(1)	68	100	220
Kinematic Viscosity at 100°C, cSt	ASTM D445	(1)	9,6	11,6	20,1
Viscosity Index, min	ASTM D2270	(1)	121	104	105
Flash Point	ASTM D92	(1)	270	265	287
Pour Point, max °C	ASTM D97	(1)	-39	-33	-27
TAN, mgKOH/g	ASTM D664	(1)	0,02	0,02	0,02
Miscibility (Low °C) 10% Lube in R134a	-	(1)	-26	-28	-18
Miscibility (High °C) 10% Lube in R134a	-	(1)	>80	>80	>80
Hydroxyl Value, mgKOH/g	ASTM E326	(1)	4	4	4

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: DRD

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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)

## Important Note

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