

PETRONAS COMPRESSOR R SYN PAO SERIES

Supreme Performance (PAO) Industrial Refrigeration Compressor Oil

PETRONAS Compressor R SYN PAO Series are supreme performance compressor oils specially developed for use refrigeration compressors using ammonia or process gas.

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 PAO 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 PAO Series meets or exceeds key industrial specifications.

Applications

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

- ammonia compressors with evaporator temperatures as low as -39°C
- process gas rotary screw and reciprocating compressors

Note: PETRONAS Compressor R SYN PAO Series are compatible with mineral compressors oils.

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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Features	Benefits						
High compatibility with most seal	Compatible	with	most	seals	and	elastomers,	which
and elastomers	prevents oil	leaks	and co	ntamina	ation	due to seal er	osion

Typical Properties

Characteristic	Method	Specification	46	68
Specific Gravity @15°C	ASTM D4052	(1)	0,833	0,844
Kinematic Viscosity at 40°C, cSt	ASTM D445	(1)	46	68
Kinematic Viscosity at 100°C, cSt	ASTM D445	(1)	7,8	10,3
Viscosity Index, min	ASTM D2270	(1)	139	138
Flash Point	ASTM D92	(1)	240	240
Pour Point, max °C	ASTM D97	(1)	-60	-51
Characteristic	Method	Specification	100	150
Characteristic Specific Gravity @15°C	Method ASTM D4052	Specification (1)	100 0,920	150 0,923
		-		
Specific Gravity @15°C	ASTM D4052	(1)	0,920	0,923
Specific Gravity @15°C Kinematic Viscosity at 40°C, cSt	ASTM D4052 ASTM D445	(1)	0,920 100	0,923 150
Specific Gravity @15°C Kinematic Viscosity at 40°C, cSt Kinematic Viscosity at 100°C, cSt	ASTM D4052 ASTM D445 ASTM D445	(1) (1) (1)	0,920 100 14,5	0,923 150 19,8

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



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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

Important Note

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