# **SINOPEC**

# **4502 Synthetic Compressor Oil**

SINOPEC 4502 synthetic compressor oil is blended with synthetic base oil and plural highly refined additives such as extreme pressure agent, anti-oxidizer, anti-corrosion agent and so on.

# **Advantages**

- Outstanding heat oxidation stability, preventing oil from damage in high temperature condition
- O Good material adaptability, preventing oil from leaking out of system during operating
- Excellent heat conductive property, reducing operation temperature of air compressor
- Outstanding coking and deposit resistant properties, enhancing safety of air compressor working in high temperature condition
- Outstanding high/low temperature property, ensuring normal operation of system in wide temperature range
- Good lubricity, protecting compressor from wear
- Outstanding over-all property, ensuring a long service life of 4000hrs~8000hrs of compressor system

# **Performance Specification**

The product meets the following specifications:

Q/SH PRD327—2010

# **Applications**

- Widely used in iron, cement, chemical, machinery and electronic industries, for the lubrication of small/moderate/large sized single/multi-stage (s) reciprocating or rotary type air compressor wherein No.32 ~ 68 for low/moderate pressure rotary compressor as well as small/moderate sized reciprocating compressor and No.100 ~ 220 for moderate/high pressure reciprocating compressor and large-sized rotary compressor
- ⊚ Applied temperature range: -40  $^{\circ}$  ~ 110  $^{\circ}$  for rotary compressor and -35  $^{\circ}$  ~ 200  $^{\circ}$  for reciprocating compressor, possibly reaching 220  $^{\circ}$  for short period of time

### **Typical Properties**

Items	4502 synthetic compressor oil				
	32	46	68	100	150
Kinematic viscosity (40 ℃), mm²/s	32.0	46.3	67.5	98.4	149.3
Neutralization value, mgKOH/g	0.16	0.20	0.17	0.19	0.18
Flash point (open), ℃	216	230	242	250	248
Freezing point, °C	-59	-55	-52	-45	-45
Anti-emulsion property, min	5	4.8	2.1	8	3.5
Corrosion (T₂Cu, 100 °C, 3hrs), level	1b	1b	1b	1b	1b
Carbon residue, % (m/m)					
Before oxidation	0.05	0.02	0.06	0.05	0.08
After oxidation	0.08	0.06	0.17	0.14	0.28



#### **Technical Certification**

- O It is listed in the Product Manual of Hefei General Machinery Research Institute
- Technical recognition for matching material by Nanjing Ingersoll Rand Compressor Ltd and Enric (Bengbu) Compressor Co., Ltd

# **Similar Foreign Products**

 As excellent as RARUS 800 series, ANDEROL 400, 500, S series of EXXON-MOBIL; CORENA D, R series of SHELL; Synthetic series of ESSO, COMPAIR special oil, ATLAS special oil, INGERSOLL-RAND special oil, Fusheng special oil

# **Application Examples**

- O A petrochemical plant located in Tianjin, China, replaced the original special oil with 4502 (46) for its COMPAIR twin screw compressor, extending the oil-change period for more than 2 times longer
- O A cement plant located in Changchun, China, successfully replaced the original oil INGERSOLL-RAND ULTRA COOLANT with 4502 (46) for its INGERSOLL-RAND twin screw compressor
- O A petrochemical plant located in Guangdong province, China, replaced the original special oil with 4502 (32) for its INGERSOLL-RAND centrifugal compressor, the result is as good as before
- QUINCY twin screw compressor of a textile mill located in Chongqing, China, has operated with lower working temperature since original special oil was replaced by 4502 (46), and the oil-change period was prolonged for 100%

#### **Special Attentions**

- Do not mix with other lubricant resulting in reduction due to possible physical or chemical reactions between different oil
- O Close the cap in time after each use, keeping moisture, dust away
- Material compatibility test should be carried out when used in lubricated part in contact with non-metallic material such as rubber, plastic and paint
- O It is normal and shall not affect application in case of darkened color after exposed to light or under long term high temperature

### **Packing**

○ To be packed with 4L, 200L iron barrels or as required by customers