



Advanced Lubricants Technology

## PRODUCT INFORMATION

### PERENNIAL SYNCOM FSR SERIES ( SYNTHETIC PISTON, ROTARY/RECIPROCATING COMPRESSOR OIL )

#### DESCRIPTION

**PERENNIAL SYNCOM FSR** is a premium **polyalphaolefin synthetic** base hydrocarbon fluids fortified with special ester and with high Viscosity Index and narrow distillation range of oil specially designed for lubricating piston and rotary compressors with oil temperatures up to 220° C.

**PERENNIAL SYNCOM FSR** contains special ashless additives to impart outstanding anti-wear properties, anti-oxidation, corrosion protection, thermal stability, low sludge formation tendency and excellent demulsibility properties. Besides, it also has good anti-foam and air release properties. These special properties will provide extended operating periods between overhauls in reciprocating compressors and perhaps be used for up to 8000+ hours of continuous operation.

**PERENNIAL SYNCOM FSR** Series oils meet specifications of Stringent DIN 51506 VD-L requirement include high resistance to oxidation and deposit formation as measured in 51352-1 oxidation test. In addition, they meet the Pneurop Oxidation test 51352-2 and low volatility requirement as measured in DIN51356. Besides, it also has a very good rust protection acc to ASTM D665 with synthetic sea water.

#### SPECIAL FEATURES:

- Extended oil change intervals, reducing servicing costs to a minimum.
- Reduced air separator blocking, and extended maintenance intervals.
- Excellent compatibility with seals, paints and the air line systems.
- Excellent viscosity – temperature behavior. / Excellent oxidation stability and resistance to ageing
- Excellent dirt transportation and cleaning properties to have longer intervals between valve cleaning
- Optimum wear protection and good pressure absorption properties / Good compatibility with elastomers
- Low foaming and good air separation / Good corrosion protection for ferrous and non-ferrous metals
- Excellent demulsifying properties totally eliminates the problems associated with the formation of sludge or water in oil emulsions, improved inter and after cooler efficiency / Lower operating cost

#### APPLICATION

The **HYCOM FSR** Series of oils are recommended for use of lubrication of both cylinders and crankcases of reciprocating air compressors. It may also be used for drip-feed rotary sliding vane and screw type compressors which are from manufacturers like Atlas Copco, Ingersoll-Rand, Broom and Wade ( Comair ) and etc.

The correct viscosity grade should always be determined from instruction manual and Equipment Builders Books.

#### TYPICAL INSPECTION TESTS

Grade, ISO VG	32	46	68	100	150
Density, g/ml @ 15°C	0.840	0.840	0.850	0.860	0.880
Colour ASTM	L1.0	L1.0	L1.0	L1.5	L1.5
Flash Point, COC, °C	220	245	245	255	265
Viscosity, cSt @ 40°C	32	46.9	69	101	152
CSt @ 100°C	5.9	7.6	10.2	13.4	18.0
Viscosity Index	133	128	133	131	132
Neutralization No, mgKOH/g(DIN51558)	0.11	0.11	0.11	0.2	0.2
Sulphate Ash %mass (DIN51575)	<0.01	<0.01	<0.01	<0.01	<0.01
Water Soluble content (DIN51582)	too low to measure				
Water Soluble acids	neutral				
Demulsifying Power (mins)	7	8	15	17	19
Air separation (mins)	2	3	4	6	7
Foam Test, ASTM Sequence I/II/III	Pass	Pass	Pass	Pass	Pass
FZG gear test (DIN51354)	12	12	12	12	12
4 Ball test (DIN51350)	0.40	0.44	0.44	0.44	0.44
Pneurop ageing test( Conradson carbon residue)	0.20%	0.20%	0.12%	0.10%	0.02%
Copper Strip Corrosion 3Hrs @ 100°C	1a	1a	1a	1a	1a

The above details is typical and does not constitute a contract in terms of properties