



Energyn RC-S

Synthetic Rotary Air Compressor Lubricant

Description; Description

Premium synthetic (non-mineral) lubricants, based on polyalpha-olefin materials, fully formulated, and containing

anti-wear additives, anti-oxidants, and corrosion inhibitors.

Applications; Applications

Energyn RC-S have been developed for air compressors operating in severe conditions. They can also be used in circulatory systems operating at high temperatures .
Energyn RC-S lubricants fully meet the currently defined requirements of the ISO-L-DAH classification for rotary-screw compressor oils, and show excellent oxidation resistance, as assessed by a rotary-compressor oxidation test (ROCOT) drawn from a modified Pneurop oxidation test using Iron Naphthenate catalyst at 120 °C

for 1000 hours. Despite test limits of the ISO-L-DAC/G/H specifications not yet being defined, the ROCOT tests are indicative of high stability, particularly bearing in mind the long hours run. The best evidence for the excellent oxidation stability of Energyn RC-S and the overall high performance are the excellent results of service trials running rotary-screw compressors operating in severe conditions (120 °C) for over 4000 hours with no change of lubricant.

Main Benefits; Main Benefits

- Can be used at longer lubricant-change intervals, thereby reducing costs of routine servicing.
- Excellent anti-wear performance in arduous conditions of heat and moisture gives long service life for compressors.
- Compressor internals are kept in clean condition.
- Zinc-free formulation minimizes blockage of oil-filters in wet conditions, and ensures excellent filterability and lubricant cleanliness.
- Compatible with seals normally used with mineral oils.

- Rapid water-separation and powerful anti-corrosion characteristics reduce the adverse effects of moisture contamination.
- Balanced combination of anti-foam and air release properties ensures rapid separation of air and lubricant in the coalescer, with consequent longer air-filter life and lower lubricant carry-over.
- Fully compatible with Energol RC-R mineral oils.
- Low volatility, reduces lubricant carry-over.

Storage; Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration
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of drum markings. Products should not be stored above 60 °C, exposed to hot sun or freezing conditions.; of drum markings. Products should not be stored above 60 °C, exposed to hot sun or freezing conditions.

Health, Safety and Environment; Health, Safety and Environment

Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.; Health, safety and environmental information is provided for this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

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Typical Characteristics; Typical Characteristics

Test Methods; Test Methods	Units; Units	Grade ; Grade :
		32 46 68 100
Density at 15°C ISO3675/ASTM D1298	kg/m ³	829 834 844 848
Flash point (COC) ISO2592/ASTM D92	°C	238 255 265 265
Autogenous ignition temp. ASTM D2155	°C	375 375 375 375
Kinematic viscosity:		
40 °C ISO3104/ASTM D455	mm ² /s	30 44 68 103
100 °C		5.5 7.5 10.5 14.3
Viscosity index ISO2909/ASTM D2270		133 135 140 142
Pour point ISO3016/ASTM D97	°C	<-50 <-50 <-50 -48
Colour		Pale Pale Pale Pale
		Yellow Yellow Yellow Yellow
Neutralization value ASTM D974	mgKOH/g	0.23 0.23 0.23 0.23
Copper corrosion ISO2160/ASTM D130	1B 1B 1B 1B	
(3 h at 100 °C)		
Corrosion, rust protection ISO7210/ASTM D665A	pass pass pass pass	
Foam tendency/stability ASTM D892 ml		
Sequence I : 24 °C	<5/0 20/0 <5/0 <5/0	
Sequence II : 93 °C	<5/0 <5/0 <10/0 <10/0	
Sequence III: 24C after 93C	<5/0 10/0 <5/0 <5/0	
Air release at 50 °C ASTM D3427/IP 313	min	1.5 1.8 6.4 14
Demulsification at 54 °C : ISO6614/ASTM D1401		
Oil ml	40 40 40 40	
Water ml	40 40 40 40	
Emulsion ml	0 0 0 0	
Time min	10 10 <15 <15	
FZG gear test : IP 334/DIN51354	Stage fail	>12 >12 >12 >12
A/8.3/90C		
Conradson Carbon Residue ASTM D189	%wt	0.01 0.01 0.02 0.02

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

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