TECHNICAL PRODUCT INFORMATION

NEUTRON 922S

Super Synthetic Ultra Coolant Compressor Oil

NEUTRON 922S is a supreme performance oils primarily intended for the lubrication of severe duty rotary screw compressors, vane air compressors, and turbochargers. They are particularly suited for marine and industrial applications subjected to high final compression temperatures or where extended oil drain intervals are desired. They are formulated with wax-free synthetic hydrocarbon fluids and a high technology additive system that assures exceptional resistance to oxidation and thermal degradation far superior to synthetic oil-based air compressor oils. They provide outstanding equipment protection and reliability for compressors operating under conditions where other air compressor oils are not meeting expectations.

NEUTRON 922S provides excellent wear protection and outstanding resistance to oxidation and thermal degradation, greatly superior to mineral oils. Their unique formulation provides the ability to reduce maintenance costs through minimizing equipment problems and downstream deposits and carryover. Their high viscosity index ensures effective lubrication at high temperatures. **NEUTRON 922S** lubricant significantly reduce the potential for fires and explosions when compared to mineral oil-based products. They exhibit a virtual absence of deposit formation and high autoignition ignition temperatures improving both performance and safety. **NEUTRON 922S** is recommended for all rotary screw and vane air compressors. They are particularly effective in screw-type compressors with oil injection cooling (a design which places especially high demands on the compressor lubricant) and for continuous high temperature operation with discharge temperatures up to 200ºC. This lubricant is recommended for units with a history of excess oil degradation, poor valve performance, or deposit formation. They are compatible with all metals used in compressor construction and with conventional mineral oil-based air compressor oils, but admixture with other oils may detract from the total performance capability. **NEUTRON 922S** oil is not recommended for air compressors used in breathing air applications as well as medical purposes. **NEUTRON 922S** is the preferred lubricant for marine diesel engine turbochargers. Its superior performance is confirmed by its approval by a lot of Turbo Systems for oil change intervals of five to eight times that permitted with any mineral oil lubricant.

Features and Benefits

A general trend in air compressor design over the years has been to higher power output, which can lead to greater thermal stress on the lubricant. In severe applications, continual intermixing occurs between the lubricant and the air being compressed. Within trapped air bubbles in the lubricant, temperatures can rise more than 100ºC. In turbo-charger applications, bearing lubricants encounter extremely high temperatures which thins the lubricant and leads to coking of lesser quality mineral and synthetic lubricants. The use of **NEUTRON 922S** oil can result in lower deposits and cleaner compressors and turbo chargers compared to conventional mineral oils, resulting in longer running periods between maintenance intervals. Their excellent oxidation and thermal stability and ability to control sludge and deposit formation safely allow extended oil life capability. They possess outstanding anti-wear and corrosion protection, which enhances equipment life and performance.

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Key features and potential benefits include:

Features	Advantages and Potential Benefits
High performance synthetic base stocks (di-ester synthetic)	Wide temperature range capability Significant performance capabilities relative to mineral oils Improved safety Extended service life
Outstanding Oxidation and Thermal Stability	Reduced coking deposits Longer oil life Improved filter life Lower maintenance costs
High Load-carrying ability	Reduced wear of bearings and gears
Effective Rust and Corrosion Protection	Improved protection of internal compressor components

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	ASTM TEST	RESULT			
ISO VG		**32**	**46**	**68**	**100**
Viscosity					
@ 40 °C	D-445	31.2	45.1	66.5	99.2
@100 °C	D-445	6.68	7.84	13.9	15.3
Gravity, @ 15,4 °C	D-287	0.840	0.845	0.865	0.962
Flash Point, °C	D-92	256	255	248	244
Pour Point, °C	D-97	-23	-32	-36	-36
Viscosity Index	D-2270	158	158	156	156
Sulfated Ash, % Wt	D-482	0.025	0.025	0.025	0.025
Color	D-1500	1.5	1.5	1.5	1.5