

BREOX AIR RANGE

INTRODUCTION

BREOX AIR compressor lubricants have been specially designed for use in rotary screw air compressors. **BREOX AIR** compressor lubricants are a fully formulated, fully synthetic blend of polyalkylene glycol and polyol ester and thus, take advantage of the excellent performance attributes of both classes of compound. In addition, due to the inherently high viscosity index of **BREOX AIR** lubricants, no additional VI improvers are required in the formulation and so the products remain stable to shear forces and do not suffer any irreversible effects.

ADVANTAGES OVER TRADITIONAL MINERAL OIL AND ESTER BASED LUBRICANTS

- High oxidative stability
- Resistant to sludge and varnish formation
- High viscosity index
- Excellent elastomeric seal compatibility
- Hydrolytically stable

TYPICAL PROPERTIES

The **BREOX AIR** range is comprised of three ISO viscosity grades; ISO **32**, ISO **46** and ISO **68**, typical properties are as follows:

The typical values presented here are believed to be accurate; however they should not be considered to constitute a specification.

Physical Attribute	Analysis Method	Value and Unit		
		AIR 32	AIR 46	AIR 68
Viscosity @40°C	ASTM D 445	31 cSt	47.07cSt	73.0cSt
Viscosity @100°C	ASTM D 445	6.5 cSt	8.93cSt	13.3cSt
Viscosity Index	ASTM D 2270	169	173	185
Density	ASTM D 1298	0.985 gcm ⁻¹	0.989gcm ⁻¹	0.990gcm ⁻¹
Flash Point (COC)	ASTM D 92	>260°C	>260°C	>260°C
Foam Tendency	ASTM D 892	Nil	Nil	Nil
Barium content	ASTM D 4951	Nil	Nil	Nil
Nitrogen content	ASTM D 4951	Nil	Nil	Nil
Max Operating Temp	-	200°C	200°C	200°C
Pour Point	ASTM D 97	<-50°C	<-50°C	<-50°C

Performance Attribute	Analysis Method	Value and Unit		
		AIR 32	AIR 46	AIR 68
4-ball wear scar (40kg, 1hr)	ASTM D4172	0.55mm	0.38mm	0.55mm
Falex Seizure Load	ASTM D3233	2000lb	2000lb	2000lb
Steam Turbine Corrosion Procedure A	IP 135	PASS	PASS	PASS
Biodegradability	CEC L-33-A-93	97.3%	96%	>95%

SEAL COMPATIBILITY

The **BREOX AIR** range of products has good compatibility with natural rubber and synthetic seal technology, for example, testing **BREOX AIR 46** with Viton at a range of temperatures over 31 days resulted in the following weight losses.

Temperature	% Weight Loss
0°C	0
25°C	0.3%
70°C	2.29%

Remarks

Handling & Safety:

A material Safety Data Sheet (MSDS) has been issued describing the health, safety and environmental characteristics of the Breox AIR range of products together with handling precautions and emergency procedures. This must be consulted and fully understood before storage, handling and use.

Storage:

Revision-No.

3.4-08.2004 Effective August 17, 2004

The product can be stored for at least 2 years at ambient storage conditions and temperature without any deterioration.

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