

Technical Report

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NA-LUBE[®] BL-1200

Performance in Synthetic Fluids

NA-LUBE BL-1200 is well suited for formulating synthetic turbine and circulating oils, including R&O oils, hydraulic fluids, gear oils, and compressor oils. Typical synthetic formulations are shown in the table below.

Tests	NA-LUBE BL-1200			
	Base Oil	95% PAO 8 5% Priolube 3970	78% PAO 8 22% NA-LUBE KR-008	80% Nexbase 3080** 20% NA-LUBE KR-008
Treat Level		0.6%	0.6%	0.6%
Demulsibility (ASTM D 1401)				
Oil-Water-Emulsion (ml)		40-40-0	41-39-0	40-37-3
Time (minutes)		20	20	10
AFNOR (wet)				
Filterability Index		1.17	1.08	1.12
Rust Test (ASTM D 665B)		Pass	Pass	Pass
Copper Corrosion (ASTM D 130)				
3 hours, 100°C		1b	1b	1a
3 hours, 135°C		1b	1b	1b
24 hours, 100°C		2a	1b	1b
24 hours, 135°C		3a	2c	1b
FZG A/8.3/90 (DIN 51354 p.2)		>12	>12	>12
Foam Test (ASTM D 892)				
Sequence I - 25°C		10-0 (10)*	10-0 (10)*	10-0 (10)*
Sequence II - 93°C		0-0 (10)	0-0 (10)	0-0 (10)
Sequence III - 25°C		10-0 (10)	10-0 (10)	10-0 (10)
4-Ball Wear Test (ASTM D 4172)				
40 kgf, 1200 rpm, 75°C, 1hr		0.46	0.54	0.51
15 kgf, 1500 rpm, 75°C, 1hr		0.30	0.38	0.31

*500 ppm of BASF's Synative AC AMH2 (Si-free defoamer) added

** Nexbase 3080 is a Group III oil

The results shown above illustrate how **NA-LUBE BL-1200** can be incorporated into various synthetic formulations. In addition, **NA-LUBE BL-1200** has excellent solubility and has been shown to be compatible with most additive chemistry's and base stocks.

(see reverse side)

NA-LUBE BL-1200

Performance in Synthetic Fluids

(continued)

Tests	NA-LUBE BL-1200		
	Base Oil	95% PAO 8 5% Priolube 3970	78% PAO 8 22% NA-LUBE KR-008
Treat Level	0.6%	0.6%	0.6%
RPVOT (ASTM D 2272) Lifetime (minutes)	1200	1200	1300
Hydrolytic Stability (ASTM D 2619) Copper Loss (mg/cm ²)	0.01	0.01	0.03
TAN of Water Layer (mg KOH)	3.5	4.0	4.0
Copper Appearance (ASTM D 130)	2e	1b	1b
CM Thermal Stability (ASTM D 2070) Precipitate or Sludge	8.8	6.8	5.6
Viscosity Change (%)	0.55	0.58	0.24
Acid Number Change (mg KOH/g)	0.09	0.42	-0.06
Steel Rod Color	2.5	5	5
Copper Rod Color	5.5	6	6

The results shown reflect data generated by King Industries' Technical Service Laboratory. Actual results may vary depending on the additive package, base oil, and test equipment design.

For Samples or Technical Service, contact King Industries or your King Representative.

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 Revision date: 19 FEB 2016

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