

Product Data Sheet

NA-LUBE FM-1219 (Formerly KX1219)



Science Road
Norwalk, CT 06852
(800) 431-7900
Fax: (203) 866-0425
E-Mail: lad@kingindustries.com

NA-LUBE FM-1219 is a liquid tungsten-based friction modifier for automotive and industrial lubricants as well as greases. **NA-LUBE FM-1219** does not contain any sulfur or phosphorus.

CHEMICAL

COMPOSITION: Organotungstate

APPEARANCE: Clear, amber liquid

TYPICAL

PROPERTIES:	Tungsten Content	4.5 %
	Nitrogen Content	2.5 %
	Viscosity @ 40°C (ASTM D445, DIN 51550)	153 mm ² /s (cSt)
	Viscosity @ 100°C (ASTM D445, DIN 51550)	14 mm ² /s (cSt)
	Density @ 25°C (ASTM D4052)	0.94 g/ml
	Flash Point, COC (ASTM D92, DIN 51376)	180°C (320°F)

Note: The above data are not specifications. Supplying the information shown in this data sheet does not obligate King Industries to manufacture this product commercially.

		<u>Typical Treat Levels</u>
APPLICATIONS:	Automotive Lubricants	0.1% - 3.0%
	Industrial Lubricants	0.1% - 2.0%
	Greases	1.0% - 4.0%

NA-LUBE FM-1219 is a tungsten-based friction modifier that imparts antifriction and antiwear properties to lubricants and greases. **NA-LUBE FM-1219** is a phosphorus-free and sulfur-free additive that has excellent solubility in most base oils including Group III and PAO.

ADVANTAGES:

- * **Good friction reducing properties**
- * **Non-phosphorus**
- * **Non-sulfur**
- * **Good solubility in low polarity base oils**

(see reverse side)

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SOLUBILITY: Soluble in petroleum and synthetic lubricant base stocks and most common solvents. Insoluble in water. However, it is recommended to verify the solubility in the base oils used and the compatibility with other additives. It is recommended that **NA-LUBE FM-1219** be added to lubricants at approximately 55°C to 70°C with agitation.

STANDARD PACKAGING: 440 lbs (200 kg) closed head drum.

STORAGE CONDITIONS: Store in a cool dry place away from any direct sources of heat and moisture. Maximum recommended storage temperature: 30°C (86°F)

SHELF LIFE: Best if used within 1 year of the date of manufacture.

HANDLING: Avoid all personal contact. Observe good personal hygiene. For additional information, it is advised to consult the Safety Data Sheet (SDS) for **NA-LUBE FM-1219**.

REGISTRATION: Please refer to Section 15 of the Material Safety Data Sheet for information.

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

King Industries, Inc.
Science Road
Norwalk, CT 06852-0588
Tel: 203-866-5551
Fax: 203-866-0425
E-mail: LAD@kingindustries.com

King Industries International, Inc.
Science Park 402,
1098 XH Amsterdam
The Netherlands
Tel: +31-20-723-1970
E-mail: info@kingintl.nl

China Sales Office
Dalian Mingruida Technical Consulting Co., Ltd.
Building 51, 20 Shuxiang Street
Dalian, China
Tel: +86-15941108485
Email: Hui.Wang@kingindustries.com

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