

# Product Data Sheet



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## NA-LUBE<sup>®</sup> FM-1187 (Formerly KX1187)

SAMPLE REQUEST

**NA-LUBE FM-1187** is a liquid molybdenum-based friction modifier for automotive and industrial lubricants as well as greases. **NA-LUBE FM-1187** does not contain any sulfur or phosphorus.

### CHEMICAL

**COMPOSITION:** Molybdenum chemistry based on organic type raw materials.

**APPEARANCE:** Clear, cherry-brown liquid.

### TYPICAL

<b>PROPERTIES:</b>	Molybdenum Content	7.0 %
	Nitrogen Content	1.9 %
	Viscosity @ 40°C (ASTM D 445, DIN 51550)	300 mm <sup>2</sup> /s (cSt)
	Viscosity @ 100°C (ASTM D 445, DIN 51550)	11 mm <sup>2</sup> /s (cSt)
	Density @ 25°C (ASTM D 4052)	0.995 g/ml
	Flash Point, COC (ASTM D 92, DIN 51376)	160°C (320°F)

Note: The above analytical data are not specifications.

	<u>Typical Treat Levels</u>
<b>APPLICATIONS:</b> Automotive Lubricants	0.5% - 3.0%
Industrial Lubricants	0.5% - 2.0%
Greases	1.0% - 4.0%

**NA-LUBE FM-1187** is a molybdenum-based friction modifier that imparts antifriction and antiwear properties to lubricants and greases. **NA-LUBE FM-1187** is a phosphorus-free and sulfur-free additive that is based on well selected organic raw materials.

When manufacturing engine oils, it is recommended to first blend the selected base oils with the additives, such as pour point depressants, viscosity improvers, and engine oil additive packages at 55°C to 70°C. **NA-LUBE FM-1187** should then be added with agitation until completely dissolved.

**ADVANTAGES:**

- \* Good friction reducing properties
- \* Non-phosphorus
- \* Non-sulfur

(see reverse side)

# NA-LUBE<sup>®</sup> FM 1187

(Formerly KX1187)

**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-1187** be added to lubricants at approximately 55°C to 70°C with agitation. **Dispersants can effectively help to solubilize/disperse NA-LUBE FM-1187.**

**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-1187.**

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

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

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