PRODUCT BULLETIN

IND-1503-2104E

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SEWINGLUBE N

High performance industrial sewing machine oil

SEWINGLUBE N is high-grade lubricant blended with highly hydrogenated refined mineral oil and various additives including antioxidants and ultraviolet absorbers. It is special oil developed for bearings and gears of industrial sewing machines and textile machineries. **SEWINGLUBE N** has two types, ISO VG 10 for general purpose sewing machine and ISO VG 15 for high speed sewing machine.

SPECIAL FEATURES

1. Light color and less odor

SEWINGLUBE N is blended with colorless transparent highly hydrogenated mineral oil and carefully selected additives. Therefore, a comfortable working environment free from unpleasant odor can be obtained.

2. Excellent weather resistance and low discoloration

In the sewing machine, we are concerned about the contamination of the surroundings in order to maintain the quality of the product.

SEWINGLUBE N is sewing machine oil that uses a special UV absorber and is extremely difficult to get discolored.

3. Good lubrication performance

There are many parts require lubrication in industrial sewing machines such as high-speed rotating bearings, cam mechanisms and sliding parts.

Recently, high-speed machines close to 10,000 rpm have been introduced to the market, and excellent lubricating oil is required to maintain the performance of high-speed machines.

SEWINGLUBE N 10 is suitable for general purpose machines and **SEWINGLUBE N 15** is suitable for high speed machines.

4. Good oxidation stability

SEWINGLUBE N can be used for a long time owing to superior base oil and additives that suppress oxidation and alteration by heat and air.

5. Excellent rust prevention and corrosion prevention

SEWINGLUBE N protects iron-based materials and copper-based bearing materials used in industrial sewing machines from rust and corrosion.

APPLICATIONS

- 1. Lubrication of industrial sewing machines (general-purpose models, high-speed models)
- 2. High-speed rotating bearing lubrication such as sewing and textile machinery
- 3. Lubrication of precision machinery
- 4. Other machines requiring high performance lubricating oil of low viscosity

CONTAINERS

200-liter drums and 20-liter cans

•TYPICAL PROPERTIES OF SEWINGLUBE N

ISO VG	10	15
Color (Saybolt)	+29	+30
Density (15°C), g/cm ³	0.832	0.834
Kinematic viscosity (40°C), $mm^{2/s}$	10.5	14.9
$(100^{\circ}C), mm^{2}/s$	2.80	3.48
Viscosity index	111	111
Flash point (COC), °C	180	198
Pour point, °C	-27.5	-25.0
Acid number, mgKOH/g	0.11	0.11
Copper strip corrosion (100°C, 3 h)	1	1
Rust prevention (distilled water, 60°C, 24 h)	No rust	No rust
Thermal stability(170°C,16h)	No deposit	No deposit

Note: The typical properties may be changed without notice. (November 2011)

• Evaluation results

Weather resistance (UV irradiation test)

(1) Test method

It is important that lubricating oils such as industrial sewing machines handling fibers are difficult to discolor even in long-term use (storage). In this test, the sample oil is irradiated with ultraviolet rays for a certain period of time to see the change in the Saybolt color before and after.

[Test condition]

Carbon arc: Sunshine carbon and UV carbon Temperature: $63 \pm 3 \circ C$ Rainfall: None

(2) Result

Weatherability

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ISO VG	10		15		
Color Saybolt (ASTM)					
Before irradiation	+29(L0.5)		+30(L0.5)		
After 140 h irradiation	+17(L0.5)		+17(L0.5)		
Acid number, mgKOH/g					
Before irradiation	0.11		0.11		
After 140 h irradiation	0.13		0.13		
Lubricity					
ISO VG		10		15	
Friction coefficient (Bowden, steel)		0.107		0.105	
Falex wear (steel,250min ⁻¹ ,80lbs,20h) mg		1.3		2.1	
Falex seizure load(steel, 290min ⁻¹) lbs		750		750	

Handling Precautions

V Follow these precautions when handling this product.

Composition :	Base Oil(s), Additives
Precautionary pictograms :	
Signal word:	Danger
Hazard Statement:	May be fatal if swallowed and enters airways
Precautionary Statements:	• Do not handle until all safety precautions have been read and understood.
Prevention	• Wear protective gloves/protective clothing/eye protection/face protection.
	• Do not allow the eyes to become exposed to the product. Do not swallow the product.
	• Wash hands thoroughly after handling.
	• Do not eat, drink or smoke when using this product.
Response	• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and
	immediately contact a physician.
	• IF ON SKIN: Wash with plenty of soap and water.
	• Do NOT induce vomiting.
Storage	• The product must be stored in a cool, well-ventilated location where it will not be exposed
	to direct sunlight.
	• Containers that have been opened must be tightly sealed.
	• Store locked up.
Disposal	• Dispose of contents/container in accordance with local/regional/national/international
	regulations.
	• If there are any doubts about proper methods of handling the product, contact the point of
	purchase before proceeding with usage.