GRS-7002-2007E

## **EPNOC GREASE 203K 2**

### **Multipurpose Grease for Very Low Temperatures**

In recent years, machines used in refrigerators and freezers have been exposed to much lower temperatures than ever before. When grease is used in such cold environments, it can harden, exert heavy loads on the machine, prevents the machinery from moving, and even damage the equipment. **EPNOC GREASE 203K 2** is a grease blended with lithium soap thickener, an ester-type synthetic base oil, and extreme-pressure agents and other additives, it can be used at very low temperatures (-70 °C).

#### SPECIAL FEATURES

#### 1. Usable at Very Low Temperature (-70°C)

The pour point of paraffin-type mineral oils, which are commonly used as the base oils of grease, is around -15 °C, so such greases become hard below that temperature. Since **EPNOC GREASE 203K 2** uses an ester-type synthetic base oil with an extremely low pour point, it provides outstanding performances at temperatures as low as -70 °C(203 Kelvin).

#### 2. Able to Withstand Heavy Loads

Since **EPNOC GREASE 203K 2** contains extreme-pressure additives, it has a high Timken value and can withstand very heavy loads.

#### 3. Excellent Shear Stability

When a grease with poor mechanical shear stability is exposed to mechanical shear in bearings or other applications, the fiber structure of the grease's thickener is broken, resulting in softening and oil separation. Thanks to its excellent mechanical shear stability, these problems do not occur with **EPNOC GREASE 203K 2**.

#### 4. Outstanding Oxidation Stability

**EPNOC GREASE 203K 2** has outstanding oxidation stability, so the grease will not degrade or undergo oil separation due to oxidation during storage or use. As a result, **EPNOC GREASE 203K 2** can be used for long periods of time.

#### APPLICATIONS

- (1) Machines used in refrigerators and freezers
- (2) Snow-removal machines
- (3) Snowmobiles
- (4) Ski lifts

#### CONTAINERS

16 kg pail cans

#### ●TYPICAL PROPERTIES OF EPNOC GREASE 203K 2

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Thickening agent		lithium soap
Base oils		
Type		ester-type synthetic oil
Viscosity (40°C)	$mm^2/s$	13.8
(100°C)	$mm^2/s$	3.44
Viscosity index		128
Penetration(60 strokes)		271
(100,000 strokes)		380
Dropping point	$^{\mathrm{o}}\mathrm{C}$	180
Oxidation stability (99°C, 100h)	kPa	14.7
Copper strip corrosion (100°C, 24h)		no green or black marks
Timken anti-load	kg	20
Approx. operating temperature range	°C	-70 to 120

Note: The typical properties are subject to change without notice. (September 2003)



# Handling Precautions

#### lacksquare Follow these precautions when handling this product.

Composition:	Base Oil, Thickener, Additives	
Precautionary pictograms:		
Signal word:	Warning	
Hazard Statement:	May cause allergic skin reaction	
	May cause damage to organs (or state all organs affected(blood systems))	
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.	
	<ul> <li>Contaminated work clothing should not be allowed out of the workplace.</li> </ul>	
	• Do not breathe dust/fume/gas/mist/vapours/spray.	
	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.	
	• IF exposed or concerned: Call a POISON CENTER or doctor/physician.	
	• Take off contaminated clothing and wash before reuse.	
	• If skin irritation or a rash occurs: Get medical advice/attention.	
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.	