

# ENS Grease

## Urea-Synthetic High-Temperature Long-Life Grease

ENS Grease is a long-life roller bearing grease with excellent properties at both low and high temperatures. It is blended from organic urea thickener, synthetic-ester base oil, and additives that provide outstanding antioxidation performance. ENS Grease can be used at high temperatures at which mineral-oil-based greases have very short lives.

### ● Special Features

#### 1. Excellent Heat Resistance

The thickeners in ENS Grease are urea compounds, so the grease has a high dropping point and little oil separation. As a result, it has excellent resistance to heat, so it can be used at high temperatures.

#### 2. Outstanding Water Resistance

ENS Grease has low water washout, so it is very resistant to water.

#### 3. Superb Rust Prevention

ENS Grease contains powerful rust inhibitors, so it prevents rust even in environments exposed to water.

#### 4. Excellent Low-Temperature Properties

ENS Grease is blended with synthetic-ester base oil, so it can be used even at temperatures as low as -40°C.

### 5. Usable for Long Periods at High Temperatures

Because ENS Grease's synthetic-ester base oil has excellent oxidative stability, this grease can be used for long periods under high-temperature conditions.

### ● Applications

ENS Grease is ideal for the following lubrication locations:

- (1) High-speed roller bearings used at low or high temperatures
- (2) Roller bearings in electric-powered machinery
- (3) Roller bearings in electrical components in automobiles
- (4) Roller bearings in drying furnaces
- (5) Roller bearings in blowers
- (6) High-speed roller bearings in machine tools

### ● Containers

16-kg pail cans, 400 g bellows-type tube (20 pcs.)

### ● Typical Properties of ENS Grease


Thickener			Urea compounds
Base oil			Synthetic-ester oil
Type			31.5
Kinematic viscosity	(40°C)	mm <sup>2</sup> /s	267
Penetration	(25°C, 60 strokes)		310
Worked stability	(25°C, 100,000 strokes)		250 minimum
Dropping point		°C	1.9
Oil separation	(100°C, 24 h)	mass%	0.38
Evaporation	(99°C, 22 h)	mass%	30
Oxidative stability	(99°C, 100 h)	kPa	No change
Copper strip corrosion	(100°C, 24 h)		0.4
Water washout	(79°C, 1 h)	mass%	Level 1 (no rust)
ASTM rust prevention	(52°C, 48 h)		0.15
Low-temperature torque	-30°C	N.m	0.02
Starting			2,253
Rotating			
Bearing life	Soda test (6204 bearings, 150°C, 10,000 rpm)	h	
Approx. operating temperature range		°C	-40 to 175

Note: The typical properties may be changed without notice. (June 2002)



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil, Thickener, Additives
<b>Precautionary pictograms :</b>	
<b>Signal word:</b>	Warning
<b>Hazard Statement:</b>	May cause allergic skin reaction May cause damage to organs (or state all organs affected(blood systems))
<b>Precautionary Statements:</b> <b>Prevention</b>	<ul style="list-style-type: none"><li>• Do not handle until all safety precautions have been read and understood.</li><li>• Wear protective gloves/protective clothing/eye protection/face protection.</li><li>• Do not allow the eyes to become exposed to the product. Do not swallow the product.</li><li>• Contaminated work clothing should not be allowed out of the workplace.</li><li>• Do not breathe dust/fume/gas/mist/vapours/spray.</li><li>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Response</b>	<ul style="list-style-type: none"><li>• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.</li><li>• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li><li>• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.</li><li>• IF ON SKIN: Wash with plenty of soap and water.</li><li>• IF exposed or concerned : Call a POISON CENTER or doctor/physician.</li><li>• Take off contaminated clothing and wash before reuse.</li><li>• If skin irritation or a rash occurs: Get medical advice/attention.</li></ul>
<b>Storage</b>	<ul style="list-style-type: none"><li>• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.</li><li>• Containers that have been opened must be tightly sealed.</li><li>• Store locked up.</li></ul>
<b>Disposal</b>	<ul style="list-style-type: none"><li>• Dispose of contents/container in accordance with local/regional/national/international regulations.</li><li>• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.</li></ul>