

# **BONNOC TS**

## **MINERAL OIL TYPE INDUSTRIAL GEAR OIL**

---

**BONNOC TS** is a high performance gear oil, which prevents loss or damage to gear surfaces even when subjected to the tough conditions of large steel-making equipment. In anticipation of the global supply, it is a next-generation gear oil with a performance that conforms to DIN 51517-3 (German Industrial Standard).

---

### ● **SPECIAL FEATURES**

#### 1. Applicable to All Type of Gears

**BONNOC TS** can be used for the gear of super, bevel helical, double helical, worm, rack, pinion, and all other type of gears.

#### 2. Long Gear Life

The superior additives in **BONNOC TS** make tough lubricating films on the gear surface that resist shocks and heavy loads and prevent wear and sticking. The longer gear life provided by **BONNOC TS** means reduced maintenance costs.

#### 3. Usable for Long Periods

Because **BONNOC TS** has excellent heat and oxidation stability, it will provide stable, long-term performance by the proper care and maintenance (preventing foreign matter from entering the oil, etc.).

#### 4. Superior Rust and Corrosion Prevention

The superior antirust and anticorrosion additives in **BONNOC TS** protect gear equipment and oil circulation systems from both rust and corrosion.

#### 5. Other Properties

**BONNOC TS**'s superior moisture separation and antifoaming properties make the oil management easy.

### ● **GRADES**

Since **BONNOC TS** is available in 9 viscosity grades ranging from ISO 68 to ISO 680, it can meet many different lubrication conditions.

### ● **APPLICATIONS**

**BONNOC TS** can be used for the lubrication of enclosed gears in a wide range of industrial machinery, including forges and other steel-making machinery, paper mills, construction machinery, mining equipment, chemical equipment, and cargo-handling machinery.

### ● **CONTAINERS**

200-liter drum, 20-liter can

**● TYPICAL PROPERTIES OF BONNOC TS**

ISO Viscosity Grade			68	100	150	220	260
Color(ASTM)			L1.0	L1.0	L1.5	L2.5	L2.5
Density(15°C)		g/cm <sup>3</sup>	0.880	0.885	0.889	0.893	0.894
Kinematic viscosity	(40°C)	mm <sup>2</sup> /s	68.3	100	152	220	259
	(100°C)	mm <sup>2</sup> /s	8.87	11.3	15.0	19.3	21.5
Viscosity index			103	98	98	99	99
Flash Point(COC)		°C	244	262	268	280	284
Pour Point		°C	-27.5	-25.0	-25.0	-17.5	-15.0
Acid number		mgKOH/g	0.13	0.13	0.13	0.13	0.13
Copper strip corrosion (100°C, 3h)			1	1	1	1	1

ISO Viscosity Grade			320	460	560	680
Color(ASTM)			L2.5	L2.5	L2.5	L2.5
Density(15°C)		g/cm <sup>3</sup>	0.896	0.899	0.899	0.896
Kinematic viscosity	(40°C)	mm <sup>2</sup> /s	315	450	588	650
	(100°C)	mm <sup>2</sup> /s	24.6	31.3	38.8	45.4
Viscosity index			99	100	105	118
Flash Point(COC)		°C	292	322	326	302
Pour Point		°C	-12.5	-12.5	-15.0	-12.5
Acid number		mgKOH/g	0.13	0.13	0.13	0.13
Copper strip corrosion (100°C, 3h)			1	1	1	1

Note: The typical properties may be changed without notice. (October 2017)



## Handling Precautions

▼ Follow these precautions when handling this product.

<b>Composition :</b>	Base Oil, Additives
<b>Precautionary pictograms:</b>	Not applicable
<b>Signal word:</b>	Not applicable
<b>Hazard Statement:</b>	Not applicable
<b>Precautionary Statements:</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>• Wash hands thoroughly after handling.</li><li>• Do not eat, drink or smoke when using this product.</li></ul>
<b>Prevention</b>	
<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></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></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>