IND-3010-2104Erev.

# **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 spur, 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)	$mm^2/s$	68.3	100	152	220	259
	(100°C)	$mm^2/s$	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)	$mm^2/s$	315	450	588	650
	(100°C)	$mm^2/s$	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

# lacksquare Follow these precautions when handling this product.

Composition :	Base Oil(s), Additives			
Hazard pictograms:	Not applicable			
Signal word:	Not applicable			
Hazard Statement:	Not applicable			
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	• F SWALLOWED: Immediately call a POISON CENTER/doctor.			
	• 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.			
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.			
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.			