

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

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**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

ISO Vissosity		68		100		150		20	200			
ISO Viscosity Grade						100		150		20	260	
Color(ASTM)			I	_1.0	L	.1.0	L	1.5	L	2.5	L2.5	
Density(15°C)	g/cm <sup>3</sup>		0	0.880		0.885		0.889		893	0.894	
Kinematic viscosity	(40°C)	C) $mm^2/s$		68.3		100		152		20	259	
	(100°C)	mm <sup>2</sup> /s	8	3.87	1	1.3	1	5.0	1	9.3	21.5	
Viscosity index			103		98		98		99		99	
Flash Point(COC)	OC) °C		244		262		2	268		80	284	
Pour Point	°C		-27.5		-25.0		-2	-25.0		7.5	-15.0	
Acid number		mgKOH/g	(	).13	0	0.13		.13 0		.13	0.13	
Copper strip corrosion (100°C, 3h)				1		1		1		1	1	
ISO Viscosity Grade				32	0	460		560		680		
Color(ASTM)				L2.	5	L2.	.5	L2.	.5	L2	.5	
Density(15°C)		g/cm <sup>3</sup>		0.89	96	0.89	99	0.89	99	0.8	96	
Kinematic viscosit	y (40°C	) mm <sup>2</sup> /s		31	5	45	0	58	8	65	0	
	(100°	C) $mm^2/s$		24.	6	31.	3	38.	8	45	.4	
Viscosity index				99	)	10	0	10	5	11	8	
Flash Point(COC)	Point(COC) °C			29	2	322		326		302		
Pour Point	°C			-12	.5	-12.5		-15.0		-12.5		
Acid number	mgKOH/		g	0.1	3	0.13		0.13		0.13		
Copper strip corrosion (100°C, 3h)				1		1		1		1		

## • TYPICAL PROPERTIES OF BONNOC TS

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



# Handling Precautions

▼ Follow these precautions when handling this product.

Commonsition :	Desa Oil(a) Additiona			
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.			