

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 ³	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 ³	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

▼ Follow these precautions when handling this product.

Composition :	Base Oil, Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Not applicable
Precautionary Statements: Prevention	• Do not handle until all safety precautions have been read and understood. • 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	• 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.
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.