

BONNOC AX

Long-life Synthetic Gear Oil for Industrial Applications

As industrial machinery advances in performance and automation, gears play a crucial role as key machine elements in maintaining high productivity. **BONNOC AX** is a synthetic industrial gear oil formulated with chemically synthesized hydrocarbon base oil, making it suitable for use in severe high-temperature and high-speed conditions. Its high viscosity index allows for use over a wide temperature range, and it offers superior lubricating properties and thermal-oxidation stability compared to common mineral-based gear oils.

● SPECIAL FEATURES

1. Outstanding Thermal and Oxidation Stability

BONNOC AX uses a synthetic hydrocarbon base oil, providing superior thermal and oxidation stability compared to common mineral-based industrial gear oils. Additionally, the carefully selected sulfur-phosphorus additives minimize sludge formation, ensuring long-term performance.

2. Extends Gear Life

BONNOC AX, with its superior additives, forms a robust oil film on gear surfaces. This film effectively withstands high loads and shock forces, preventing wear and seizure. Extending gear life helps reduce maintenance costs.

3. Prevents Rust and Corrosion

BONNOC AX contains excellent rust and corrosion inhibitors that protect not only gear units but also oil circulation systems from rust and corrosion.

4. Good Compatibility with Seal Materials

BONNOC AX exhibits good compatibility with seal materials, comparable to that of mineral-based gear oils.

5. Other Performance Characteristics

BONNOC AX also excels in water separation and antifoaming properties, making oil maintenance extremely easy.

● GRADES

BONNOC AX is available in 7 grades, ranging from ISO Viscosity Grade 68 to 680, allowing users to select the appropriate grade for their specific usage conditions.

● APPLICATIONS

It is suitable for the lubrication of closed gears in various industrial machinery, including steel manufacturing, forging, paper manufacturing, construction, mining, chemical manufacturing, and material handling equipment.

BONNOC AX can be used for all types of gears, including spur, bevel, helical, double helical, worm and rack & pinion gears.

● CONTAINERS

200-liter drum and 20-liter pail can

● TYPICAL PROPERTIES OF BONNOC AX

ISO Viscosity Grade	68	100	150	220	320	460	680
Color (ASTM)	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5	L0.5
Density (15°C) g/cm ³	0.851	0.854	0.856	0.856	0.855	0.856	0.858
Kinematic viscosity (40°C) mm ² /s	70.1	101	155	219	320	432	670
Kinematic viscosity (100°C) mm ² /s	10.8	14.1	19.7	25.5	38.0	48.6	69.8
Viscosity index	144	143	146	147	167	172	180
Flash point (COC) °C	270	276	276	282	284	282	286
Pour point °C	≤-50.0	≤-50.0	≤-50.0	≤-50.0	≤-50.0	-47.5	-45.0
Acid number mgKOH/g	0.54	0.56	0.57	0.42	0.42	0.42	0.43
Copper strip corrosion (100°C, 3h)	1	1	1	1	1	1	1
Rust prevention (distilled water, 60°C, 24 h)	No rust	No rust	No rust	No rust	No rust	No rust	No rust
Timken OK load kg	25	25	27	27	27	30	30

Note: The typical properties may be changed without notice. (May 2024)



Handling Precautions

▼ Follow these precautions when handling this product.

BONNOC AX 68, BONNOC AX 100, BONNOC AX 150

Composition :	Base Oil(s), Additives
Hazard pictograms:	
Signal word:	Warning
Hazard Statement:	May cause an allergic skin reaction. Harmful to aquatic life Harmful to aquatic life with long lasting effects.
Precautionary Statements:	<ul style="list-style-type: none">• 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.• Avoid release to the environment.• Contaminated work clothing should not be allowed out of the workplace.• Avoid breathing dust/fume/gas/mist/vapours/spray.• Wash hands thoroughly after handling.• Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none">• IF 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.• If skin irritation or a rash occurs: Get medical advice/attention.• Take off contaminated clothing and wash it before reuse.
Storage	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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.

BONNOC AX 220、BONNOC AX 320、BONNOC AX 460、BONNOC AX 680

Composition :	Base Oil(s), Additives
Hazard pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Harmful to aquatic life Harmful to aquatic life with long lasting effects
Precautionary Statements:	<ul style="list-style-type: none"> • 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. • Avoid release to the environment. • Wash hands thoroughly after handling. • Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none"> • IF 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.
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