

# **PJ-100**

### NanoTech Synthetic Blend Gear Oil

Thirsty Bird NanoTech Gear Oil PJ-100 formulated especially for pumpjack gearboxes and suitable for any other type of enclosed

industrial gear drives where an extreme pressure gear oil is specified. NanoTech PJ-100 enhanced by billions of Fullerene-like Tungsten Disulfide nanoparticles (IF-WS2). These AW/AF/EP particles serve as submicron-sized shock absorbers, preventing exposure to hydraulic pressures, and also function as tiny ball-bearings that roll on impact, improving anti-friction and anti-wear properties of Thirsty Bird NanoTech Gear Oil. IF-WS2 nanoparticles also help improve heat transfer. PJ-100 provides superior stability and good pumpability at low temperatures. Thirsty Bird NanoTech Gear Oil maintains film strength, viscosity, remains tacky and clings to gears in high operating temperatures for extended periods. PJ-100 is a high-performance gear oil with outstanding antifriction and load-carrying properties for optimal pumpjacks operations year-round.

### **APPLICATIONS**

Recommended for and meets the general requirements of major manufacturer enclosed industrial gear drives operating under normal, heavy or shock-loaded conditions. These include: Spur, Internal, Planetary, Rack & Pinion, Bevel, Spiral-Bevel, Helical, Herringbone and Worm gears. Our innovative formulation is also recommended for lubricating all types of heavy or shock-loaded bearings. Suitable for use in applications where the appropriate viscosity is specified:

- AGMA 9005 D-24, 250.04, 251.02 ISO 12925-1 type CKC
- US Steel 224
- DIN 51517 Part 3

- API Service GL-2
- Cincinnati Machine/Milacron

### BENEFITS

- Reduces operating and maintenance costs
- Maintains superior stability and good pumpability at low temperatures
- Withstands high operating temperatures for longer periods
- Minimizes equipment noise
- Extends oil drain intervals
- Increases equipment life & improves efficiency

### **Thirsty Bird Sales & Service Ltd.**



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### **TYPICAL TECHNICAL PROPERTIES**

Physical Properties	Test Method	Results
Color	Visual	Dark Gray
AGMA Grade		3EP
Gravity	ASTM D1298	31.71
Viscosity @ 40°C (cSt)	ASTM D445	95 - 110
Viscosity @ 100°C (cSt)	ASTM D445	11 - 12.3
Viscosity Index (min)	ASTM D2270	109
Flashpoint °C	ASTM D92	220
Pour point °C	ASTM D5950	-35°C to -40°C
Coefficient of Friction	ASTM D2266	0.0783
Four ball Weld Load	ASTM D4172	250
Four ball Scar diameter	ASTM D2782	0.26
Rust test	ASTM D665	Pass

All stated physical properties are typical of standard production and may vary

### **PRECAUTIONARY STATEMENTS**

Do not consume. Avoid skin and eye contact. Wear gloves, eye, and face protection. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Keep out of the reach of children.

### **FIRST-AID MEASURES**

Following inhalation: If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact: Wash with plenty of soap and water.

Following eye contact: Remove contact lenses, if present, and easy to do. Continue rinsing. Irrigate copiously with clean water for at least 10 minutes, holding the eyelids apart.

Following ingestion: Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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