TEXACO STARFAK® PM

CUSTOMER BENEFITS

Texaco Starfak PM delivers value through:

- **Continuous high temperature stability**
- **Low temperature pumpability**
- **Low temperature lubrication**
- **Excellent oxidation, corrosion and wear protection**
- **Excellent water resistance**
- **Extended relubrication intervals**

FEATURES

Texaco Starfak PM is a multipurpose, high performance grease specially formulated for extreme pressure bearing applications operating under the most extreme high and low temperature conditions and for those difficult applications requiring extended lubrication intervals.

It is manufactured using selected highly refined high viscosity synthetic base oils, a lithium complex thickener, rust and oxidation inhibitors, and extreme pressure and tackiness additives.

The high viscosity index of the synthetic base oils allow for greater pumpability at subzero (-29°C/-20°F) temperatures, allowing bearings lubricated with Texaco Starfak PM to operate at temperatures as low as -51°C (60°F).

APPLICATIONS

Texaco Starfak PM grease is recommended for use in applications with temperatures up to 232°C (450°F), with a dropping point of approximately 288°C (550°F).

Texaco Starfak PM is ideal for a wide variety of applications across several industries, including:

- **Paper and Forest Products** — This grease is suitable for severe service applications such as: sludge press bearings, lime kilns, pumps, woodyard heavy equipment, Doctor oscillator bearings, felt roll bearings, pulp refiner bearings, rope sheaves, and exhaust fan bearings. It is particularly well-suited for the highest temperature applications, such as felt roll bearings and lime kilns operating at temperatures in excess of 204°C (400°F).
- **Mining** — Texaco Starfak PM is recommended for:
  - — mining operations that involve extreme pressure applications requiring excellent low temperature pumpability. Applications include: pins and bushings on buckets and loaders, shaker screens, crushers, and conveyors.
  - — the lowest temperature mining applications.
  - — automatic lubricating systems in onboard shovels, trucks, and other mobile equipment.
- **Off-Road Construction** — This grease is ideally suited for lubrication systems that involve pumping grease through long supply lines at low temperatures. It also displays superior water washout resistance properties in wet, off-road environments.
- **Steel** — Steel mill applications often involve extremely high temperatures. The excellent structural stability of Texaco Starfak PM makes it appropriate in these situations. Its extreme pressure properties and superior resistance to water washout are also key in the steel mill environment. This grease provides outstanding protection for steel mill roll bearings, conveyors, furnace and coiler grease points, pump bearings, and exhaust fan bearings.
- **Marine** — The rust and corrosion inhibition properties of Texaco Starfak PM makes it ideal for use in marine equipment exposed to severe corrosion environments. Examples include deck equipment, offshore drilling equipment, grease lubricated shaft bearings, cranes, and windlass winches.

Texaco Starfak PM is approved for the NLGI certification mark LB.

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GR-22220

TYPICAL TEST DATA

Product Number	*222657*
MSDS Number	*8841*
Operating Temperature, °C(°F) Minimum[1] Maximum[2]	 -51(-60) 235(450)
Penetration, at 25°C(77°F) Unworked Worked	 295 315
Dropping Point, °C(°F)	312(594)
Timken OK Load, lb	50
Four-Ball Weld Point, kg Wear, Scar Diamer, mm	 500 0.26
Load Wear Index, kg	79
Bearing Water Washout, wt % loss at 175°F	5
Copper Corrosion	1B
Thickener, % Type	 13.0 Lithium Complex
Viscosity, Kinematic* cSt at 40°C cSt at 100°C	 344 35.5
Viscosity, Saybolt* SUS at 100°F SUS at 210°F	 1791 172
Viscosity Index*	148
Flash Point, °C(°F)*	280(536)
Texture	Smooth, Buttery
Color	Light Tan

Typical test data are average values only. Minor variations which do not affect product performance are to be expected in normal manufacturing.

1 Minimum operating temperature is the lowest temperature at which a grease, already in place, could be expected to provide lubrication. Most greases cannot be pumped at these minimum temperatures.

2 Maximum operating temperature is the highest temperature at which the grease could be used with frequent (daily) relubrication.

* Determined on synthetic oil extracted by vacuum filtration.