



STARPLEX[®] SYN HD

1.5

(formerly Ulti-Plex[®] Synthetic Grease EP)

PRODUCT DESCRIPTION

Starplex[®] Syn HD is a high performance grease specially formulated for extreme pressure bearing applications operating under high and low temperatures.

CUSTOMER BENEFITS

Starplex Syn HD delivers value through:

- **High temperature stability**
- **Low temperature pumpability**
- **Low temperature lubrication**
- **Excellent corrosion protection**
- **Excellent water washout performance**
- **Long relubrication intervals**

FEATURES

Starplex Syn HD is a high performance grease specially formulated for extreme pressure bearing applications operating under 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. It is light tan in color and smooth and buttery in texture.

Starplex Syn HD provides an alternative for high temperature applications. The uniform molecular structure of the synthetic base oils reduces friction between moving parts and boosts lubrication performance over a wide temperature range.

The high viscosity index of the synthetic base oils allow for exceptional pumpability at subzero (-18°C/0°F) temperatures, allowing bearings lubricated with

Starplex Syn HD to operate at temperatures as low as -51°C (-60°F).

APPLICATIONS

Starplex Syn HD is recommended for use in applications with temperatures up to 232°C (450°F), with a dropping point of approximately 280°C (536°F).



Starplex Syn HD is ideal for a wide variety of applications across several industries, including:

- **Paper and Forest Products** — Starplex Syn HD is recommended for 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. Starplex Syn HD is particularly well-suited for high temperature applications, such as felt roll bearings and lime kilns operating at temperatures in excess of 204°C (400°F) when combined with frequent re-lubrication.
- **Mining** — Starplex Syn HD is recommended for
 - mining operations that involve high pressure applications requiring low temperature pumpability. Applications include: pins and bushings on buckets and loaders, shaker screens, crushers, and conveyors
 - low temperature mining applications
 - automatic lubricating systems in onboard shovels, trucks, and other mobile equipment
- **Off-Road Construction** — Starplex Syn HD is well suited for lubrication systems that involve pumping grease through long supply lines at low temperatures. It also displays exceptional water washout resistance properties in wet, off-road environments.

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A **Chevron** company product

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- **Marine** — The rust and corrosion inhibition properties of Starplex Syn HD make it ideal for use in marine equipment exposed to corrosion environments. Examples include deck equipment, offshore drilling equipment, grease lubricated shaft bearings, cranes, and windlass winches.

Starplex® Syn HD is registered by **NSF** and is acceptable as a lubricant where there is no possibility of food contact (H2) in and around food processing areas. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements of appropriate use, ingredient review and labeling verification.

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TYPICAL TEST DATA

NLGI Grade	Test Method	1.5
Product Number		250188
SDS Number		5343
Operating Temperature, °C(°F) Minimum ^a Maximum ^b		-51(-60) 232(450)
Penetration, at 25°C (77°F) Unworked Worked	ASTM D217	295 315
Dropping Point, °C(°F)	ASTM D2265	280(536)
Timken OK Load, lb	ASTM D2509	50
Four-Ball Weld Point, kg Load Wear Index, kg	ASTM D2596	500 79
Bearing Water Washout, wt % loss at 175°F	ASTM D1264	5
Lincoln Ventmeter, psig at 30 s, at 24°C (75°F) -1°C (30°F) -18°C (0°F) -30°C (-22°F)	K95400	38 → 517 725
Copper Corrosion	ASTM D4048	1B
Thickener, % Type		13.0 Lithium Complex
ISO Viscosity Grade, Base Oil Equivalent		460
Viscosity, Kinematic (Base Fluid) cSt at 40°C cSt at 100°C	ASTM D445	460 43.0
Viscosity Index (Base Fluid)	ASTM D2270	145
Flash Point, °C(°F) (Base Fluid)	ASTM D92	288(550)
Texture		Smooth, Buttery
Color		Light Tan

- a Minimum operating temperature is the lowest temperature at which a grease, already in place, could be expected to provide lubrication. Most greases can't be pumped at these minimum temps.
- b Maximum operating temperature is the highest temperature at which the grease could be used with frequent (daily) relubrication.
- Not tested at this temperature.

Minor variations in product typical test data are to be expected in normal manufacturing.

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