



Starplex Syn HD 1.5

High performance high temperature synthetic grease

(previously known as Ulti-Plex S Grease EP)

Product description

Starplex Syn HD is a high-performance grease specially formulated for extreme pressure bearing applications operating under high and low temperature conditions and for applications requiring extended lubrication intervals.

Starplex Syn HD is formulated with a lithium complex in combination with an advanced additive package to offer high adhesion properties, good oxidation resistance, and effective corrosion resistance.

Customer benefits

- High stability formulation offers advanced performance in extreme heat.
- Low temperature pumpability helps provide effective lubrication in cold conditions.
- Good corrosion protection helps shield against rust and corrosion.
- Formulated for water washout resistance to help protect in wet environments.
- Good oxidation stability and adhesion properties helps reduce maintenance requirements.

Product highlights

- **Formulated for advanced performance in extreme heat.**
- **Low temperature pumpability.**
- **Good corrosion protection.**
- **Formulated for water washout resistance.**
- **Suitable for extended lubrication intervals.**

Selected specification standards include:

DIN

ISO

Applications

Starplex Syn HD 1.5 is ideal for a wide variety of applications across several industries, including:

Paper and Forest Products

This lubricant is suited 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
- Exhaust fan bearings

Starplex Syn HD 1.5 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 with centralised lube systems.

Mining

Starplex Syn HD 1.5 is particularly recommended for mining operations that involve extreme pressure applications requiring good 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 effective water washout resistance properties in wet, off-road environments.

Steel

Steel mill applications often involve high temperatures. The advanced structural stability of Starplex Syn HD 1.5 makes it appropriate in these situations. Its extreme pressure properties and resistance to water washout are also key in the steel mill environment. This grease provides advanced 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 Starplex Syn HD 1.5 make 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.

Approvals, performance and suitable for use

Performance

	DIN 51502	ISO 6743-09	Operating temperature
Starplex Syn HD 1.5	KPHC 1.5N -40	ISO-L-XCD(F)IB 1.5	-40 °C up to 140 °C, with frequent relubrication up to 180 °C for a short period of time

Product maintenance and handling

Maintaining a clean work environment is critical when equipment greasing is performed. Grease fittings should be wiped clean prior to grease injection to prevent contaminants from entering the equipment. Bearing housings should be maintained one-third to one-half full of grease. Over-greasing should be avoided as excessive heat build-up can result. Periodic relubrication via grease gun or centralized system should be supplemented by complete cleaning and packing with fresh grease on an appropriate schedule.

Avoid any spillage of used and unused product to the environment.

Product residue and package/container should be disposed of in dedicated collection points.

Typical test data		
Test	Test Methods	Results
Typical Shelf Life: 36 months from date of filling indicated on the product label		
Color	Visual	Yellow-beige
Appearance	Visual	Smooth
NLGI grade	DIN 51 818	1.5
Thickener Type		Lithium Complex
Base Oil Type		PAO
Base Oil Viscosity, mm ² /s	Calculated	350
Base Oil Viscosity, mm ² /s (base oil mix + polymers)	Calculated	460
Penetration worked, 60x, mm/10	ISO 2137	291
Dropping Point, °C	DIN ISO 2176	>280
Emcor corrosion test, distilled	DIN 51 802	pass
Copper corrosion at 24hrs/120 °C	DIN 51 811	1a
Water Resistance Static	DIN 51 807/1	1/90
Water Resistance Dynamic,%	DIN 51 807/2	11.1
Four ball Wear, method E, mm	DIN 51 51350/5	0.65
Four ball EP, N	DIN 51350/4	3600
Four ball wear test, mm	ASTM D2266	0.6
Low temperature torque at -30 °C g-cm	ASTM D1478	ST T 1905 1 hr RT 312
Low temperature torque at -40 °C g-cm	ASTM D1478	ST T 5317 1 hr RT 975

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).

Disclaimer: Data provided in this Product Data Sheet (PDS) is based on standard tests under laboratory conditions and is indicative only. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Neither Chevron nor its subsidiaries (i) make any warranty or representation as to the accuracy or completeness of this PDS; and/or (ii) accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.

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.

When disposing of used product, take care to protect the environment and follow local legislation.

Safety Data Sheets (SDS's) are available for all Chevron products. If you require a SDS or any further information regarding a Chevron product, please contact your local sales office or see <http://europe.chevronlubricants.com>.

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