

**Overview** ▶ BioGrease HDS XT 2 is a biodegradable, minimally toxic, synthetic lithium complex grease formulated to provide high film strength, withstand high operating temperatures, and maintain excellent stability. BioGrease HDS XT 2 features a high viscosity base oil for high load carrying capabilities. BioGrease HDS XT 2 also has excellent anti-wear, enhanced water washout properties, and high temperature stability. It is designed for heavy-duty use in a variety of industrial, mobile, and marine applications.



BioGrease HDS XT 2 is formulated featuring our proprietary **eSyn™** technology. Available in NLGI grade 2.

## Typical Properties ▼

Property	ASTM Test Method	HDS XT 2
Product Code		BG32004XT
NLGI Grade		2
Base Oil Type		Synthetic Ester (ISO 220)
Appearance		Tacky
Worked Penetration, 60 Strokes	ASTM D217	265 - 295
Dropping Point, °C	ASTM D225	255
Base Fluid Viscosity at 40 °C, cSt	ASTM D445	195.7
4-Ball Weld, kg	ASTM D2596	400
4-Ball Wear Scar Dia, mm	ASTM D2266	0.59
Water Washout at 79°C, % Loss	ASTM D1264	4.2
Water Sprayoff, % Loss	ASTM D4049	13.6
Roll Stability, Pts Change	ASTM D1831	+8
Water Stability, Pts Change After Shell Roll	ASTM D7342	+31
Copper Corrosion	ASTM D4048	1B
Readily Biodegradable (meaning>60%)		Pass
Biodegradability, %	OECD 301B	>60
Minimally Toxic		Pass
Algae (EC 50), 72 hr, mg/L	OECD 201	>26,000
Daphnia (EC 50), 48 hr, mg/L	OECD 202	>13,000
Fish (LC 50), 96 hr, mg/L	OECD 203	>40,000
Not Bioaccumulative (Calculated value as per EPA standard)		Pass
Bio-based Content, %	ASTM D6866	86

## Key Attributes / Approvals ▶



Any industry (hydroelectric powered dams, construction, refuse, mining, dredging, marine, agriculture, oil & gas, plant operations, etc.) utilizing equipment with a need for a heavy duty grease, especially systems where a release into the environment is possible or where a leak or spill could reach a waste stream. This product contains proprietary tackifier additives that make it ideal for marine construction, pins, bushings, and sheave applications.

- USDA BioPreferred Program
- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's guidance document that defines standards for Environmentally Acceptable Lubricants (EPA 800-R-11-002) and as required by EPA's 2013 U.S. Vessel General Permit (VGP)

See the Safety Data Sheet (SDS) for emergency, proper handling and disposal information.

Rev. BGHDS XT 2-06032020