

Overview ▶ BioGrease HD is a readily biodegradable, minimally toxic, Lithium 12- OH Stearate grease formulated to provide high film strength, withstand high operating temperatures, and maintain excellent stability. BioGrease HD features a high viscosity base oil for high load carrying capabilities. BioGrease HD also has excellent anti-wear and water washout properties. It is designed for heavy-duty use in a variety of industrial, mobile, and marine applications.



BioGrease HD is formulated featuring our proprietary **eSyn™** technology. available in NLGI grades 1 and 2.

Typical Properties ▼

Property	ASTM Test Method	HD #1	HD # 2
Product Code		BG22001	BG22002
NLGI Grade		1	2
Color		Amber	Amber
Penetration	ASTM D217	310-340	265-295
Dropping Point °F (°C)	ASTM D2265	>350 (176)	>350 (176)
Viscosity @40°C, cSt	ASTM D445	220	220
Viscosity @100°C, cSt	ASTM D445	45.6	45.6
Flash Point °F (°C)	ASTM D92	520 (271)	520 (271)
Fire Point °F (°C)	ASTM D92	550 (287)	550 (287)
Timken OK Load, lbs	ASTM D2509	55	55
Water Washout, % loss max	ASTM D1264	6	6
4 Ball Wear, mm	ASTM D2266	.50	.50
4 Ball EP Weld Load, lbs	ASTM D2596	315	315
Rust Test, 1% Synthetic Sea Water	ASTM D05959	Pass	Pass
U.S. Steel Mobility, gm/min	USS LT-37		
@ 77° F		2574	1168
@ 20° F		393	166
@ 0° F		106	36
Copper Corrosion	ASTM D4048	1A	1A
Rust Test, A & B	ASTM D665	Pass	Pass
Readily Biodegradable (meaning>60%)		Pass	Pass
Biodegradability, %	OECD 301B	>75	>75
Minimally Toxic		Pass	Pass
Algae (EC 50), 72 hr, mg/L	OECD 201	>26,000 mg/L	>26,000 mg/L
Daphnia (EC 50), 48 hr, mg/L	OECD 202	>13,000 mg/L	>13,000 mg/L
Fish (LC 50), 96 hr, mg/L	OECD 203	>40,000 mg/L	>40,000 mg/L

Not Bioaccumulative (Calculated value as per EPA standard)		Pass	Pass
Bio-based Content, %	ASTM D6866	90	90

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. Suitable for use in automatic lubrication systems or via manual application.

- 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.

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