



Renewable Lubricants, Inc.

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Bio-SynXtra EP Open Gear Grease NLGI #1



"Biobased Lubricants that Perform Like Synthetics"

PRODUCT BENEFITS

- Biodegradable, Tacky/adhesive, High viscosity (>1800 cSt @ 40°C).
- NLGI #1 capable of handling heavy loads at slow speeds and performing in a wet environment where exposure to rain is possible. Can be sprayed - *or* - diluted in a suitable solvent to allow it to be sprayed.

Test Method	Test	Biodegradable Open Gear Grease
Visual	Color	Black
Visual	Appearance/texture	Smooth/Very tacky
	Base Oil viscosity, cSt:	
D445	40°C	1908
D445	100°C	227.4
D2270	VI	258
	Base oil type	Synthetic/Natural esters
D217	Penetration, unworked	325
D217	Penetration, Worked, 60X	325
D2596	4 ball weld (kg)	620
D2266	4 ball wear, scar diameter	0.66 mm
	Coefficient of Friction	0.058
D4049	Water Sprayoff, % loss	2.9
D4048	Copper Corrosion, rating	1b
CTM-1	Evaporation Loss, % loss	0.25
D1743	Rust Test, DI water	Pass
D1831	Dry Roll Stability, 2hrs @ 25°C	9.26%
D1831	Wet Roll Stability, 10% water, 2hrs @ 25°C	15.12%
CTM-3	Brookfield Viscosity, T-C spindle, 1 rpm	
	0°C	1,192,000 cP
	-10°C	1,968,000 cP
	-20°C	6,960,000 cP
	Lincoln Ventmeter, psi @	
	0°C/32°F	320 psi
	-10°C/14°F	650 psi
	-20°C/-4°F	1180 psi

Bio-SynXtra EP Open Gear Grease meets the Environmental Protection Agency (EPA) 2013 Vessel General Permit (VGP) guidelines for Environmentally Acceptable Lubricants (EALs), and should be used where **LOW TOXICITY**, **BIODEGRADABILITY** and **NON-BIOACCUMULATION** properties are required. Bio-SynXtra EP Open Gear Grease is an **ENVIRONMENTALLY RESPONSIBLE** lubricant that is formulated from renewable agricultural biobased resources. We believe Earth's environmental future rests in the use of renewable materials.

**¹Ultimate Biodegradation (Pw1) within 28 days in ASTM D-5864 Aerobic Aquatic Biodegradation of Lubricants.
Readily Biodegradable within OECD 301B Method**

STABILIZED by Renewable Lubricants™* is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. High Oleic Base Stock (HOBS) are agricultural vegetable oils. This Stabilized technology allows the HOBS to perform as a high-performance formula in high and low temperature applications, reducing oil thickening and deposits.

Patented Product: US Patent 6,383,992, US Patent 6,534,454 with additional Pending and Foreign Patents

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Availability F.O.B.: Hartville, Ohio, USA 5 Gal Pail Drum Totes Bulk

Item # NLGI #1 Biobased Open Gear Grease