



Renewable Lubricants, Inc.

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Bio-Mist™ EP Cutting Oil

STABILIZED™
by Renewable Lubricants

"Biobased Lubricants that Perform Like Synthetics"

A heavy duty, ultimately biodegradable¹, vegetable based, mist EP cutting oil which provides excellent performance where misting or standard cutting applications are needed in a wide variety of machining operations on non-ferrous metals, tough ferrous alloys as well as mild steel and cast iron. These operations include: milling, drilling, turning, grinding, broaching, and thread cutting and tapping. This (Biopreferredsm) product does not contain active sulfur, chlorine, zinc, phosphorus, silicon, or heavy metals, and does not produce an abrasive odor and is non-staining. In addition, this oil is particularly useful for machining stainless and harder materials, such as tool steels, Inconel, and Hastalloy.

Performance is enhanced by use of the Stabilized HOBS's, natural ester composition, which provides cutting tool wetting and oiliness; combined with EP and antiwear components. The super high viscosity index of the Stabilized™ HOBS adds additional cutting qualities to this high performance lubricant.

The advantages are many: biobased, biodegradable, renewable, low toxicity, no hazardous volatile organic compounds (VOC), more fire resistant, safer, EPA and ISO 14000 compliant, reduces foreign oil, and helps secure the American Economy, OSHA and worker acceptance is high with biobased oils.

Typical Specifications

ISO Grade	32
VISCOSITIES:	
@100 ^o F SUS	145
@40 ^o C., cSt.	31.3
@100 ^o C., cSt.	7.3
Viscosity Index	211
Flash Point, COC.,	204 ^o C (400 ^o F)
Pour Point, ^o C.	-14
Copper Corrosion ASTM D-130	1B
4-Ball EP ASTM D-2783	
Non-Seizure Load kg	126
Weld Load kg	800
Load Wear Index	152
Rust Prevention ASTM D-665	No Rust
Tapping Test	
304 Stainless Steel, % Efficiency	125
1020 HR Steel, % Efficiency	120
Falex EP Test, (Fail load lbs.)	4250

Bio-Mist™ EP Cutting Oil meets the Environmental Protection Agency (EPA) Vessel General Permit (VGP) guidelines for Environmentally Acceptable Lubricants (EALs), and should be used in applications where **LOW TOXICITY, BIODEGRADABILITY** and **NON-BIOACCUMULATION** properties are required. It exceeds the acute toxicity (LC-50 / EC-50 >1000 ppm) criteria adopted by the US Fish and Wildlife Service and the US EPA. Bio-Mist™ EP Cutting Oil is an **ENVIRONMENTALLY ACCEPTED 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

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, US Patent 6,624,124, US Patent 6,620,772 with additional Pending and Foreign Patents

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<u>Availability</u>	<u>F.O.B.: Hartville, Ohio, USA</u>	<u>1 Gallon</u>	<u>5 Gallon Pail</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
RLI Product Item #		86733	86734	86736	86737	86739