



## Renewable Lubricants, Inc.

476 Griggy Rd., P.O. Box 474

Hartville, Ohio 44632-0474

Voice: 330.877.9982 Fax 330.877.2266

Web: [www.renewablelube.com](http://www.renewablelube.com)

**Bio-Parts Cleaner/Degreaser™ (Food Grade<sup>2</sup> H1) Item # 86630**

**STABILIZED™**  
Renewable Lubricants

**Bio-Parts Cleaner/Degreaser™ plus Corrosion Protection Item # 86660**



**Bio-Parts Cleaner/Degreaser™ LFLV (Food Grade<sup>2</sup> H1) Item # 87590**

### Introduction:

These all-purpose biobased products remove oily grimy dirt on used parts for maintenance and repairs and are excellent for cleaning engines, transmissions, differentials, electric motors, and machinery parts before rebuilding. Exceptional for cleaning road grime, pine sap, and tar on equipment. They are ultimate biodegradable<sup>1</sup> and provide a safer direct replacements for mineral spirits and Stoddard solvents (excellent electrical insulating value @ 47kV), and have been formulated with anti-oxidants for improved stability. EPA, OSHA, Workers Acceptance is high with Biobased Products (Biobased is fully processed synthetic soy-solvent for allergen free food grade cleaners/degreasers). Contains no animal byproducts and are manufactured under kosher supervision.

**Applications for:** –Food Manufacturing –Military –Industrial –Transportation –Marine –Agricultural –Mining – Provides Safe Non-flammable Cleaning of Equipment including: Jacks, Bearings, Bolts, Linkage Cables, Dies, Wire Ropes, Chains, Cables, Tracks, Slides, Shafts, Assembly Parts, Hand Tools, Power Tools, Firearms, Air Tools, Machine Tools, Unfinished Metal Surfaces, etc.

### **Bio-Parts Cleaner/Degreaser™ (Soy-Based Food Grade<sup>2</sup> H1)**

A specially formulated, ultimately biodegradable<sup>1</sup> Soy Cleaner/Degreaser that is a safe improvement over petroleum solvents for cleaning parts and equipment in food processing plants. This safe, nonflammable biobased product contains no hazardous Volatile Organic Compounds (no VOCs according to CARB).

#### **TYPICAL TEST DATA:**

ASTM D-445 3.9 cSt @ 40°C

ASTM D-93 PMCC Flash Point, 130 °C (266 °F)

ASTM D-97 Pour Point, -12°C  
Pound per Gallon, 7.16

ASTM D-665A Corrosion Test, Pass  
ASTM D-130 Copper Corrosion, 1a

ASTM D-877 Dielectric Strength, 47kV

ASTM D-1160 Distillation Temp, 355 °C

**RLI Product Item # 8663-**

Emulsification with Water- None

### **Bio-Parts Cleaner/Degreaser™ plus Corrosion Protection (Non-Food Grade Product)**

This ultimately biodegradable<sup>1</sup> product is the same as above Bio-Parts Cleaner Degreaser with the exception that it is non-food grade. It provides all the same performance benefits plus it is formulated with a non-food grade corrosion inhibitor to provide short term corrosion protection on ferrous and non-ferrous metal surfaces. This safe, nonflammable biobased product contains no hazardous Volatile Organic Compounds (no VOCs according to CARB). Excellent for cleaning assembly parts and new unfinished metal, and provide short term in-house storage protection.

#### **TYPICAL TEST DATA:**

ASTM D-445 3.9 cSt @ 40°C

ASTM D-93 PMCC Flash Point, 130 °C (266 °F)

ASTM D-97 Pour Point, -12°C  
Pound per Gallon, 7.16

ASTM D-665A&B Corrosion Test, Pass  
ASTM D-130 Copper Corrosion, 1a

ASTM D-877 Dielectric Strength, 47kV

ASTM D-1160 Distillation Temp, 355 °C

**RLI Product Item # 8666-**

Emulsification with Water- None

## **Bio-Parts Cleaner/Degreaser™ LFLV (Soy-Based Food Grade<sup>2</sup> H1)**

A specially formulated Low Flash-Low VOC (LFLV), that provides faster evaporation and less oily film after cleaning. It is an ultimately biodegradable<sup>1</sup> Cleaner/Degreaser that is a safer improvement over just petroleum solvents alone for cleaning parts and equipment in food processing plants. This safe, nonflammable low VOC product contains approximately 25% Volatile Organic Compounds (VOCs).

### **TYPICAL TEST DATA:**

ASTM D-445 2.5 cSt @ 40°C

ASTM D-97 Pour Point, -20°C

Pound Per Gallon, 6.9

ASTM D-877 Dielectric Strength, 50kV

**RLI Product Item # 8759-**

ASTM D-93 PMCC Flash Point, 80 °C (176 °F)

ASTM D-665A Corrosion Test, Pass

ASTM D-130 Copper Corrosion, 1a

ASTM D-1160 Distillation Temp, 355 °C

Emulsification with Water, None

- Meet the Environmental Protection Agency (EPA) 2013 Vessel General Permit (VGP) guidelines for ENVIRONMENTALLY ACCEPTED LUBRICANTS (EALs), and should be used where LOW TOXICITY, BIODEGRADABILITY and NON-BIOACCUMULATION properties are required.
- They exceed the acute toxicity (LC-50 / EC-50 >1000 ppm) criteria adopted by the US Fish and Wildlife Service and the US EPA.
- They are ENVIRONMENTALLY RESPONSIBLE lubricants formulated from renewable agricultural biobased resources.
- Earth's environmental future rests in the use of renewable materials.

<sup>1</sup> Ultimate Biodegradation (Pw1) within 28 days in ASTM D-5864 Aerobic Aquatic Biodegradation of Lubricants

<sup>2</sup> Base oils and additives in this product are listed in 21 CFR 178.3570, Lubricants for incidental food contact (USDA H1). Full compliance with other applicable restrictions of FDA, USDA, oil spill, and oil pollution prevention statutes is recommended.

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.

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**Availability F.O.B.: Hartville, Ohio, USA 1 Gallon 5 Gallon Pail Drum Totes Bulk**