



# Renewable Lubricants, Inc.

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## **Bio-Food Grade™ GP Lubricants H1** **(ISO- 10, 15, 22, 32, 46, 68, 100, 150, 220, 320, 460)**



### *"Biobased Lubricants that Perform Like Synthetics"*

Bio-Food Grade™<sup>1</sup> GP (General Purpose) Lubricants H1 are vegetable oil-based lubricants that contain ingredients which are "Generally Regarded as Safe" (GRAS) for food processing equipment. They have excellent oxidative stability and high biodegradability and can be used in environmentally sensitive areas such as in agriculture, marine, and food processing plants. They are **Specially formulated to offer the lowest toxicity in food and aquatic conditions.** Bio-Food Grade™ GP Lubricants provide excellent compatibility with many types of rubber, general purpose elastomers, and other materials they may be in contact with. These oils provide short term corrosion protection for metal parts and they are non-staining to aluminum and yellow metals. Their natural oiliness provides excellent lubricity in equipment that does not require anti-wear and E.P. additives. Contains no animal byproducts and are manufactured under kosher supervision

**Applications:** Anti-static oils for textile industry, Drip oilers, air-oilers, air-tools, water pumps, bearings, machine oil, roller chains, cables, light circulating oil, dust suppressants, seamer oils for can seaming machines, etc., and general lubrication. The products may also be used in light reduction units where original equipment manufacturers require a Food Grade R&O lubricant without EP.

Bio-Food Grade™ GP Lubricants are **ENVIRONMENTALLY RESPONSIBLE** lubricants that are formulated from renewable agricultural plant resources. Earth's environmental future rests in the use of renewable material.

The advantages are many: biodegradable, renewable, low toxicity, no volatile organic compounds (VOCs), safer, more fire resistant, EPA and ISO 14000 compliant.. OSHA and worker acceptance are high with biobased oils.

### **Typical Specifications**

| ISO Grade                       | 10    | 15    | 22    | 32    | 46    | 68    | 100   | 150    | 220    | 320     | 460   |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|---------|-------|
| ASTM Grade (Neutral Oil)        | 60N   | 75N   | 105N  | 150N  | 215N  | 315N  | 465N  | 700N   | 1000N  | 1500N   | 2500N |
| Spec. Gravity @ 60°F. (D-287)   | .85   | .87   | .88   | .89   | .90   | .90   | .90   | .90    | .90    | .90     | .90   |
| VISCOSITIES:                    |       |       |       |       |       |       |       |        |        |         |       |
| @ 100°C., cSt. (D-445)          | 2.97  | 4.0   | 5.05  | 7.18  | 9.93  | 13.3  | 19.0  | 26.9   | 36.4   | 50-52   | 69.0  |
| @ 40°C., cSt. (D-445)           | 10.0  | 14.71 | 20.52 | 31.28 | 45.67 | 64.95 | 99.13 | 151.29 | 220.30 | 320-350 | 467   |
| Viscosity Index (D-2270)        | 160   | 176   | 190   | 205   | 213   | 215   | 215   | 216    | 218    | 222     | 226   |
| Flash Point, COC, °C (D-92)     | 146   | 180   | 220   | 250   | 280   | 280   | 280   | 280    | 280    | 275     | 270   |
| Pour Point, °C (D-97)           | -20   | -20   | -20   | -20   | -20   | -18   | -15   | -10    | -5     | -5      | 0     |
| Copper Corrosion ASTM D-130     | 1B    | 1B    | 1B    | 1B    | 1B    | 1B    | 1B    | 1B     | 1B     | 1B      | 1B    |
| Rust Prevention (D-665 A)       | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  | Pass  | Pass   | Pass   | Pass    | Pass  |
| *Stabilized-Oxidation Inhibited | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes   | Yes    | Yes    | Yes     | Yes   |
| RLI Product Item #              | 87300 | 87310 | 87320 | 87330 | 87340 | 87350 | 87360 | 87370  | 87380  | 87390   |       |

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.

<sup>1</sup>The products are acceptable as lubricants for incidental food contact (USDA H1) (21-CFR-178.3570) for use in and around food processing areas. Lubricants with incidental food contact may be safely used on machinery used for producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food, subject to the provisions of this section:

- (a) The lubricants are prepared from one or more of the following substances:
  - (1) Substances generally recognized as safe for use in food.
  - (2) Substances used in accordance with the provisions of a prior sanction or approval.

Such compounds may be used on food processing equipment as a protective anti-rust film, as a release agent on gaskets or seals of tank closures, and as a lubricant for machine parts and equipment in locations in which there is a potential exposure of the lubricated part to food.

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