

# **Bio-Process™ Oils**

(SUS-50, 70, 100, 150, 200)

#### Biobased, Food Grade (H1) Processing Oils for Industrial Applications

Bio-Process™ Oils are readily biodegradable lubricants designed to replace neutral petroleum mineral oils in a variety of industrial processing applications. Formulated with Stabilized™ HOBS (High Oleic Base Stock) technology, these oils offer excellent oxidative stability, light color retention, and superior compatibility with elastomers and mineral/synthetic oils. These food-grade fluids meet FDA regulation 21 CFR 178.3620 (b and c), making them ideal for use in food packaging, canning, adhesives, rubber compounding, dust suppression, and asphalt modification.

#### Benefits

- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- Meets FDA 21 CFA 178.3620 (b and c) for incidental food contact
- Highly refined, bleached, deodorized with excellent color stability
- High oleic content provides superior oxidative resistance
- No chlorine, sulfur, or aromatic content
- Excellent elastomer compatibility and lubrication properties
- OSHA and worker-safe; no VOCs and low toxicity
- EPA and ISO 14000 compliant
- Reduces dependence on petroleum and supports renewable resource use

### **Application / New Filling**

- Ideal for use as:
  - o Canning oils
  - o Dust suppressants
  - o Paper defoamers
  - o Rubber and adhesive compounding additives
  - o Extender oils in rubber processing
  - o Surface lubricants in food packaging and canning lines
- Selected grade based on required Saybolt viscosity (SUS at 100°F)



## **Specifications and Approvals**

- ASTM D-5864: Ultimate Biodegradation
- OECD 301 Readily Biodegradable
- FDA Regulation; 21 CFR 178.3620 (b and c) compliance
- H1 Food Grade status with food-safe base oils and additives
- Kosher Certified
- Patented Stabilized™ HOBS Technology
  - o U.S. Patents: 6,383,992; 6,534,454; 6,624,124; 6,620,772

### **Typical Specifications**

Viscosity Grade (SUS)	50	70	100	150	200
Viscosity, cSt @40°C (D-445)	7.3	13.0	20.9	31.7	38.0
API Gravity @ 60°F. (D-287)	36.8	32.6	29.3	26.7	25.6
Pounds/Gallon @ 60°F.	7.08	7.18	7.32	7.45	7.50
Spec. Gravity @ 60°F.(D-287)	0.85	0.87	0.88	0.89	0.90
Flash Point, COC, <sup>o</sup> C (D-92)	146	180	220	250	290
Pour Point, <sup>o</sup> C (D-97)	-20	-20	-20	-20	-20
*Stabilized-Oxidation Inhibited RLI Product Item #	Yes 87020	Yes 87030	Yes 87040	Yes 87050	Yes 87060

STABILIZED by Renewable Lubricants\* is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. 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 \* Trademark of Renewable Lubricants, Inc. Copyright 1999 Renewable Lubricants, Inc.

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

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

<sup>&</sup>lt;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.

