

Bio-Vacuum Pump™ Oil

(ISO 46, 68)

Bio-Vacuum Pump™ Oil is a readily biodegradable, synthetic-blend lubricant specifically formulated for use in vacuum pump applications, including those in the dairy industry such as automatic milking machines. This high-performance fluid delivers anti-wear, anti-rust, anti-oxidation, anti-foam, and demulsibility properties, meeting or exceeding requirements for modern vacuum pumps. Its formulation includes Stabilized™, which deliver superior high viscosity index and oxidative stability while minimizing volatility and enhancing fire safety.

Bio-Vacuum Pump™ Oil meets the criteria of Environmentally Acceptable Lubricants (EALs) under the EPA 2013 Vessel General Permit (VGP). It exceeds LC-50 / EC-50 thresholds set by the US EPA and US Fish and Wildlife Service.

Benefits

- Readily biodegradable, environmentally non-toxic, not bioaccumulative
- Low volatility for reduced emissions and high flash/fire safety
- Excellent oxidation resistance and thermal stability
- Compatible with vacuum pumps requiring anti-wear and demulsibility performance
- Superior lubricity and wear protection extends pump life
- Exceeds EPA VGP 2013 EAL requirements
- Meets acute toxicity requirements (LC-50 / EC-50 >1000 ppm)

Application / New Filling

- Recommended for use in:
 - Dairy industry vacuum systems (e.g., automatic milking machines)
 - General-purpose vacuum pump applications requiring ISO 46 or 68
 - Provides reliable protection in pumps exposed to harsh operating conditions
 - For fluid changeovers, consult Renewable Lubricants, Inc. for proper conversion procedures

Specifications and Approvals

- Complies with EPA VGP 2013 (EAL Compliant)
- ASTM D 5864 Ultimately Biodegradable
- OECD 301B Readily Biodegradable
- LC-50 / EC-50 >1000 ppm – Low toxicity per US EPA / USFWS
- Patented Stabilized™ additive system (US Patents 6,383,992 and 6,534,454)

Typical Specifications		
SAE Grade	10W30	30
ISO Grade	46	68
VISCOSITIES:		
@100°C., cSt.	9.67	11.2
@40°C., cSt.	43.8	62.8
Viscosity Index	216	189
Flash Point, COC, OC.	243°C	248°C
Fire Point, COC, OC.	268°C	270°C
Pour Point, OC.	-36°C	-30°C
Brookfield, @-250 C., cP, (D-2983) MRV @ -30 O C, (TP-1)	3000 8000	
Copper Corrosion Strip 3hr @ 100OC.	1B	1B
4 Ball Wear, 1h, 1670 F, 1200 RPM, 40kg Demulsibility (D-1401)		
Foam Sequence I, II, III (D-892)		
Rust Prevention, (D-665 A&B)		
Item#	84100	84110

