



Environmental Lubricants Manufacturing, Inc.

# ELM M-PLEX Plus™ - High Performance Cutting Oil (Straight Oil) Part Number: GUF-170- Plus Biodegradable Soy-Based Cutting Oil

**DESCRIPTION** ELM Premium Cutting Fluid™ is a high performance cutting and way lube fluid. Formulated with the best optimized USA-grown natural seed oils and select additives, it surpasses the lubricity and performance of conventional metalworking fluids.

- APPLICATIONS**
- General purpose cutting and grinding
  - Milling, tapping, and reaming
  - Gear cutting, broaching, gun drilling and screw machining
  - Sharpening high-speed steel and carbide cutting tools

- BENEFITS**
- Reduces product inventory
  - Improves surface finishes in machining and grinding operations
  - Superior lubricity maximizes feed rates and improves productivity
  - Reduces chip welding so tools remain free cutting
  - Cooler operating and less smoke allow higher operating speeds
  - Less mist generation
  - Safe for all metals
  - Improves centricity, accuracy and part run-out
  - Improves part quality by reducing tool or wheel pressure
  - Will help your business comply with ISO-14000
  - Does not contain chlorine
  - High flash and fire points

<b>TYPICAL PROPERTIES</b>	<u>Value</u>
Appearance	Light Yellow
Viscosity @40°C, cSt	38-42
Viscosity @100°C, cSt	8.5
Flash Point, °C (°F)	310 (590)
Fire Point, °C (°F)	348 (658)
4-Ball Wear, mm	0.30
Pin & Vee Block Test	3335 lbs
Pour Point, °C (°F)	-20 (-4)
Oxidative Stability Index	>500 hrs
Base Oil Biodegradability – OECD 301	Pass
Base Oil Aquatic Toxicity – OECD 202	Non-Toxic
Base Oil Plant Toxicity - OECD 208	Non-Toxic

**PACKAGING**

5 Gal. Pails  
55 Gal. Drums  
275 Gal. Totes

**PRECAUTIONS** ELM METALWORKING FLUIDS ARE MANUFACTURED FROM HIGH QUALITY NATURAL SEED OILS AND BLENDED WITH SELECT ADDITIVES. AS WITH ALL METALWORKING FLUIDS, GOOD PERSONAL HYGIENE AND CAREFUL HANDLING SHOULD ALWAYS BE PRACTICED. AVOID PROLONGED CONTACT TO SKIN, SPLASHING INTO THE EYES, INGESTION OR INHALING OF VAPOR OR MIST. PLEASE REFER TO THE MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION.

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