

**MicroLubricant ML-100**  
**Minimum Quantity Lubrication**  
**Medium-Heavy Duty MQL**  
**For Soft Metals, Steel and Cast Aluminum**



**Product Description**

**MicroLubricant ML-100** is a medium to heavy-duty minimal quantity lubricant for soft metals, carbon steel and cast aluminum.

The process of using minute quantities (drops) of lubricant as opposed to flood lubricant to machine or form metal is now available to you. Microlubrication is a relatively new technology that has been used successfully to substitute costly Oil Re-circulation and non environmentally-sound Mist System. It has provided excellent results both in terms of performance and total system cost.

Metalloid has taken the “microlubrication” concept one step further with the VIP4Air that can achieve ultra-low volume oil discharge and at the same time provide electronic monitoring (using a custom designed differential flow sensor integrated into the unit). This allows true microlubrication by applying micro-amounts of lubricants at more frequent intervals whilst giving positive feedback that oil is correctly being injected and mixed into the air stream. Our System contains all components necessary to achieve and monitor optimum minimal Air/Oil Lubrication.

Micro Lubrication, now that's... **Clever.**

**Benefits**

- ✓ *Eliminates* coolant waste
- ✓ *Eliminates* coolant maintenance
- ✓ *Eliminates* corrosion
- ✓ *Eliminates* post cleaning process
- ✓ *Eliminates* rancidity and odors
- ✓ *Eliminates* costly additives
- ✓ *Eliminates* mixing/measuring
- ✓ *Eliminates* smoke and oil residue
- ✓ *Improves* air quality – no misting
- ✓ *Eliminates* staining on sensitive metals
- ✓ **100% Biodegradable**
- ✓ Produces dry chips – easier to process
- ✓ Cost effective
- ✓ *Eliminates* petroleum oils
- ✓ *Reduces* friction and heat
- ✓ *Faster* machining – *Improved* finishes

**Applications**

- ✓ Milling
- ✓ Drilling
- ✓ Tapping
- ✓ Grinding
- ✓ Rollforming
- ✓ Circular Sawing
- ✓ Band sawing
- ✓ Reaming
- ✓ Punching
- ✓ Bending

**Directions For Use**

**ML-100** is used as received. The lubricant is typically applied directly to the cutting tool through an adjustable applicator that does not atomize. The lubricant must contact the tool before cutting or forming begins. Increasing the feed eliminates hot parts and reducing the feed eliminates hot tooling

**Properties**

<b>Appearance</b>	Clear, amber liquid	<b>Water Solubility</b>	N/A
<b>Odor</b>	Bland	<b>pH</b>	N/A

**Packaging ML-100** is available in 1 gallon containers, 5 gallon pails, 55 gallon drums and 330 gallon totes

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for loss, damage, or expense, direct or consequential, arising out of their use.

No one understands micro lubrication better than Metalloid, so no one else can bring you advanced technology that works on the issues that matter to you. Get the whole story by calling Metalloid at **800.686.3201**.



**Michigan Facility**

1160 White Street  
 Sturgis, MI 49091  
 telephone 269.503.7300  
 facsimile 269.503.7795

[www.metalloidcorp.com/microlubricants](http://www.metalloidcorp.com/microlubricants)

**Texas Facility**

1720 N. Quevado St  
 Jacksonville, TX 75766  
 telephone 903.589.3933  
 facsimile 903.589.3924