

**MicroLubricant ML-400**  
**Minimum Quantity Lubrication**  
**Heavy Duty MQL Tough Steel and**  
**Aluminum Alloys**



**PRODUCT DESCRIPTION**

*MicroLubricant ML-400* is a synthetic derived minimal quantity lubricant typically applied in “drops” to eliminate traditional flood coolant applications. *MicroLubricant ML-400* is ideally suited for *near dry machining* of abrasive aluminum alloys, stainless steels and exotic alloys. This product is the ideal choice to replace water dilutable coolants in the most severe operations machining tough alloys.

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
- ✓ *Improves* air quality – no misting
- ✓ *Eliminates* smoke and oil residue
- ✓ *Faster* machining – *Improved* finishes
- ✓ Produces dry chips – easier to process
- ✓ Cost effective
- ✓ *Eliminates* petroleum oils
- ✓ *Reduces* friction and heat

**APPLICATIONS**

All metal operations benefit from MQL due to the unique lubrication properties, including but not limited to the specific operations listed below:

- ✓ Sawing & Cut-Off
- ✓ General and CNC Machining
- ✓ Rollforming
- ✓ Tapping
- ✓ Spinning
- ✓ Metalforming operations

**DIRECTIONS FOR USE**

*MicroLubricant ML-400* is used as received. The lubricant is typically applied directly to the cutting tool through an adjustable applicator that does not atomize. *MicroLubricant ML-400* must contact the tool **before** cutting or forming begins. Increasing the feed rate eliminates hot parts and reducing the feed rate eliminates hot tooling.



**PROPERTIES**

Appearance	Red, clear liquid	Water Solubility	N/A
Odor	Bland	pH	N/A

**PACKAGING**

*MicroLubricant ML-400* is available in 1 gallon containers, 5 gallon pails, 55 gallon drums and 330 gallon

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**.



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