

Extreme Pressure Advantage!

Unist has expanded its line of MQL lubricants with a new oil specifically formulated for ferrous metals. Like all Unist fluids, Coolube® 2210XP is derived from natural vegetable oils, is machinist and environmentally friendly, and contains no VOC's.

The unique blend of sulfurized extreme pressure additives provide increased performance when machining ferrous metals—without the typical sulfur smell. Coolube® 2210XP also performs better on copper corrosion tests than other extreme pressure lubricants and features reduced staining. If you primarily machine ferrous metals, but also sometimes cut aluminum or brass, Coolube® 2210XP is the right lubricant choice for you.

Coolube® And MQL

These days, “going green” is a concern for many manufacturers and implementing Minimum Quantity Lubrication (MQL) with Unist Coolube® is an easy step in that direction. MQL is the process of applying minute amounts of high-quality lubricant directly to the cutting tool/work piece interface instead of using traditional flood coolants. MQL minimizes your environmental impact by significantly reducing fluid usage and eliminating the need for coolant treatment and disposal. These benefits are multiplied further when using 100% biodegradable Coolube® lubricants which are formulated from renewable, plant-based oils. When considering these facts along with the performance benefits of Coolube® and MQL, it becomes obvious that this is the future of metal cutting!

What Makes Coolube® Unique?

Using the right lubricant is very important in MQL applications. The perfect lubricant will adhere to the surface of the tool and provide a thin, low-friction barrier between the cutting tool and work piece. Studies have shown that Coolube® has superior properties which make it an ideal lubricant. Coolube's® polar properties create a strong consistent bond between Coolube® and metallic surfaces. This creates an even, strong, and durable layer of lubrication. Coolube® reduces friction 50% better than typical mineral oils—preventing heat buildup and resulting in longer tool life and a superior cut finish.

Coolube® 2210XP Benefits

- No sulfur odor
- Improved tool life
- Less housekeeping
- Increased chip value
- Reduced yellow-metal staining
- Increased production speed
- No fluid oxidation (stickiness)
- No employee health concerns
- No coolant treatment or disposal
- No thermal shock with carbide tools



Environmental Impact

Coolube®'s 100% natural, non-toxic, renewable, plant-based oil composition makes it an ideal choice for manufacturers who care about their environmental impact. Coolube® contains no petroleum products, is 100% chlorine and silicone free and produces no harmful VOC's. Coolube® is completely biodegradable, yet still has a long shelf life.

Coolube® is consumed
in the process.



Impact On Your Shop

Coolube® is as good for your shop as it is for the global environment. Its non-toxic formula is safe for workers and will not cause dermatitis. Implementing MQL with Coolube® also eliminates coolant spills and overspray resulting in dry machines and floors and improved safety conditions.

Impact On Your Bottom Line

Coolube® is one of the most cost-effective metal cutting fluids available when you consider the amount of Coolube® required and the additional benefits it offers. Coolube® is most effective when applied sparingly. In a typical operation, the amount of Coolube® consumed in an eight hour shift is only a few ounces. This is in stark contrast to traditional flood coolant systems that require gallons of coolant, coolant filtering, testing, treatment, and disposal. Replacing a flood coolant system with Coolube® and a Unist MQL system eliminates these costs while often increasing tool life and improving surface finish. Additional savings include reduced housekeeping/cleaning costs and an increase in the recycling value of chips because they are clean and dry.

Increased Chip Value

Coolube®



Coolant



Coolube® 2210XP (extreme pressure)

- Odor: characteristic
- Appearance: yellow
- Water solubility: insoluble
- Flash point: >400°F [200°C]
- Oxidization/polymerization: none
- Available:
 - 1 gallon [3.78 liters]
 - 5 gallon pail [18.92 liters]
 - 55 gallon drum [208 liters]

Health, Safety, and Environmental

- Not classified as a hazardous substance.
- No sticky residue build-up (oxidation) even after prolonged use.
- Promotes safe, clean, and healthy work environments.
- Contains no silicones, chlorine, or petroleum products.
- Eliminates the need to manage cutting fluids.

Safety Data Sheet: unist.com/sds