

Technical Information

BOELUBE® 70090 Liquid HIGH EFFICIENCY NEAR DRY MACHINING LUBRICANT

Description



BOELUBE® 70090 Liquid is nontoxic, non-irritating, environmentally safe synthetic lubricant for minimum quantity lubrication (MQL).

The special BOELUBE[®] chemistry yields a high polar lubricating film, which greatly reduces friction minimizing heat generation, and subsequently the need to remove heat.

Environmentally Safe / Worker Friendly

Manufactured from personal care ingredients, BOELUBE[®] 70090 Liquid is non-toxic, non-irritating and biodegradable.

BOELUBE[®] 70090 Liquid is non-corrosive, nonflammable, chemically stable, and free of Halogens, Silicone, Petroleum, Paraffin Wax, Sulfur and Phosphorus, whether added or present in any ingredients.

BOELUBE® 70090 Liquid is effective for machining many types of materials such as Aluminum, Titanium, Stainless Steel, Carbon Fiber, Composites, Honeycomb, Inconel, Kevlar, Wood, Ferrous and Non-ferrous Metals.

BOELUBE® 70090 Liquid is extremely cost effective in applications such as Drilling, Tapping, Reaming, Deburring, Grinding, Milling, Routing, Sawing, Stamping and Punching.

BOELUBE[®] 70090 is designed for all Fine Droplet, Spray and Oil Hole Tool applications.

Typical BOELUBE[®] 70090 Liquid usage is approx. 1 fluid oz. (30 ml) or less per hour of machining time, which is best determined by the machining process and workpiece composition. BOELUBE[®] 70090 Liquid is most effective when used in minimal quantity.

Boelube 70090 will remain liquid at temperatures as low as -22 F (-30 C).

Using a coaxial supply of compressed air and lubricant to the nozzle, the nozzle directs BOELUBE[®] 70090 liquid droplets in the compressed air directly to the cutting edge.

The compressed air helps move chips from the tool cutting edge as fine lubricant droplets form a thin film at the point of contact to reduce friction and heat generation, and help keep tools cool.

BOELUBE[®] 70090 Liquid is widely used in the operation of portable positive feed drills.

BOELUBE[®] 70090 Liquid can also be delivered continually through tools with internal channels directly to the cutting edge in drilling, reaming, tapping, and milling applications.

BOELUBE[®] 70090 Liquid will provide superior lubricity leading to better surface finish, longer tool life, and yield closer tolerance parts.

BOELUBE® 70090 Liquid is for the most part consumed in the machining process with little or no clean-up or related costs and no disposal costs. The resulting chips are dry, not tacky and can be reclaimed without further processing.

Typical Properties

Physical State: Color: Solubility in Water: VOC Content: Pour Point: Liquid Clear Insoluble Non-volatile (< 0.1%) -57 C

Produced under license from Boeing Intellectual Property Licensing Company. BOELUBE® is among the trademarks owned by Boeing. These products represent a family of proprietary lubricants developed through Boeing manufacturing operations and lubricant experience. The Orelube Corporation holds an exclusive worldwide license from Boeing Intellectual Property Licensing Company to manufacture and market the BOELUBE® series of lubricants.

