

BOELUBE SOLIDS

Multi Use Solids

High Performance MQL Lubricants



BOELUBE®



A BOEING DEVELOPED LUBRICANT

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BOELUBE® Solid is dermal non-irritant, biodegradable synthetic lubricant for **minimum quantity lubrication (MQL)** application.

BOELUBE® LUBRICANTS FOR NEAR DRY MACHINING ■■■

One of the earlier uses of near dry machining was in aircraft manufacturing. Freon® gas was used in three distinct areas of the riveting process – drilling, rivet insertion, and rivet-head milling. Because of the undesirable effects of Freon® gas on the ozone layer, Boeing manufacturing research and development engineers introduced an alternative method using BOELUBE® lubricant compositions to efficiently lubricate and cool tools by preventing heat buildup, while greatly reducing the reworking after drilling that had been necessary with Freon® because of exit burrs, oversized holes, and a rough finish on the inside surface of the holes.

BOELUBE® lubricants were used in drilling, reaming, and coldworking of fastener holes in aircraft wing skins; installation of wedge-head lock bolts; lubrication of hand drills; and on machinery that automatically drill rivet holes and install rivets on large sections of airplanes. It was shown that the application of minimal quantities of BOELUBE® lubricant could reduce friction, speed production, increase tool life, and improve surface finish and hole quality in a number of machining operations.

BOELUBE® Solids are extremely cost effective in single point work such as drilling and reaming.



TYPICAL PROPERTIES ■■■

70200

- Solid
- White
- Insoluble in Water
- Melt Range: 90-110F (32-43C)

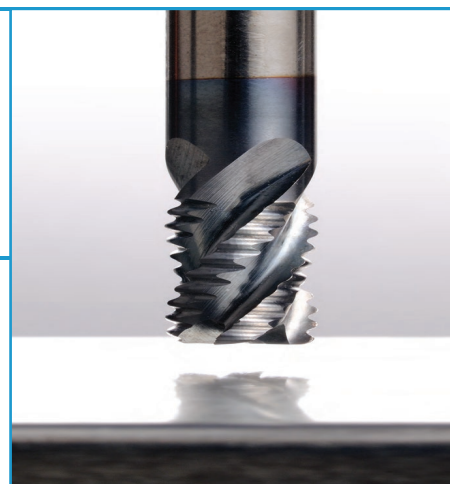
70201

- Solid
- Pink
- Insoluble in Water
- Melt Range: 90-110F (32-43C)

PRODUCT BENEFITS ■■■

70200 / 70201

- High Lubricity
- 100% active
- Long shelf life
- Minimal lubricant usage



MATERIALS ■■■

	70200	70201
Alloy	✓	✓
Aluminum	✓	✓
CFRP	✓	✓
Composite	✓	✓
Copper	✓	✓
Glass fiber	✓	✓
Kevlar	✓	✓
Stainless steel	✓	✓
Titanium	✓	✓
Wood	✓	✓

Certifications

BOEING

BAC Boeing Process Specification
5008 • 5054 • 5063 • 5492 • 5540
5578 • 5657 • 5768

BOMBARDIER

BAMS 569-001 Rev B Lubricants/
Coolants

ISO 9001:2015

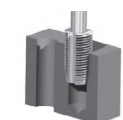
ISO Quality Management System
Certification

Applications

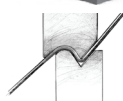
Drilling



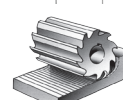
Tapping
Reaming



Forming



Milling



And many more...

BOELUBE SOLIDS

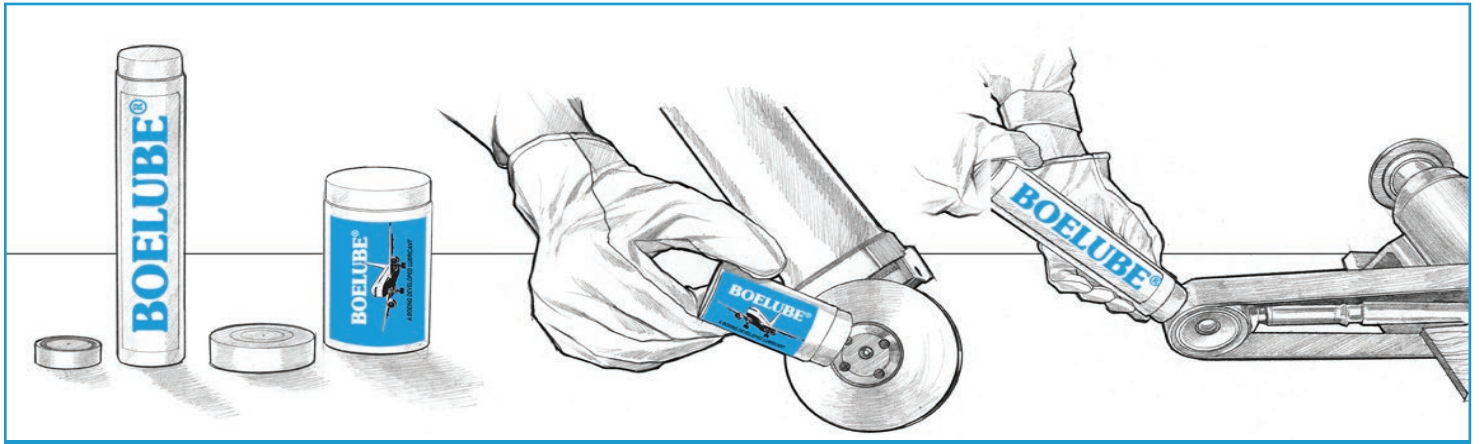
Technical information

FOR DRILLING AND REAMING ■■■

A drill will have cutting edges and straight or helical grooves or flutes, which allow for movement of chips and cutting fluids/coolants. Drill wear is not proportional to the number of holes drilled, but occurs at an accelerated rate.

A reamer is a rotary cutting tool (similar to a drill) with one or more cutting elements, used to enlarge to an exact size and impart a smooth finish to, a previously drilled hole. Reaming is essentially a finishing operation; Drilling can be characterized as in a rough form, whereas reaming is the exact form.

Improve tool life by reducing heat build-up by applying BOELUBE push-up tubes or individual blocks to the tool before start-up in belt, disc and wheel grinding operations



BOELUBE SOLIDS ■■■



- Non-petroleum
- Non-sulfur
- Non-phosphorus
- Non-silicone
- Non-paraffin wax
- Non-halogen
- Non-corrosive
- Contain no water
- Used in aerospace and other manufacturing industries

BOELUBE SOLIDS PRODUCT LIST ■■■

70200-13	Multi Use White Solid	Push Tube 1.6 oz - 45 g	50 per Box	300 per Case
70200-40	Multi Use White Solid	Push Tube 3.5 oz - 99 g	32 per Box	192 per Case
70200-00	Multi Use White Solid	Cartridge 14.5 oz - 411 g	12 per Box	24 per Case
70200-14	Multi Use White Solid	Block 4 oz - 113 g	64 per Box	192 per Case
70200-18	Multi Use White Solid	Block 2 oz - 57 g	30 per Box	180 per Case
70201-13	Multi Use Pink Solid	Push Tube 1.6 oz - 45 g	50 per Box	300 per Case
70201-40	Multi Use Pink Solid	Push Tube 3.5 oz - 99 g	32 per Box	192 per Case
70201-00	Multi Use Pink Solid	Cartridge 14.5 oz - 411 g	12 per Box	24 per Case

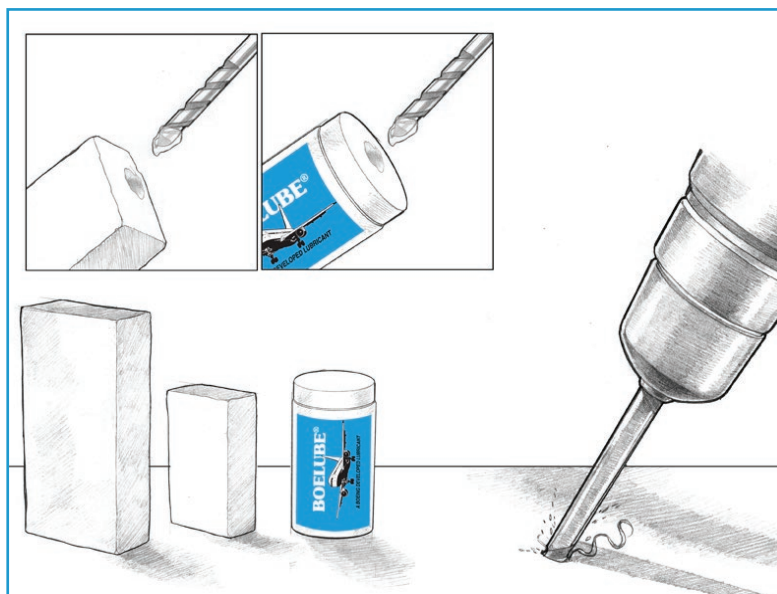
BOELUBE® SOLIDS ■■■

Save time and money while being environmentally responsible.

Historically, the metalworking industry has used metalworking fluids by flood application in machining operations. But because the costs associated with use, management, and disposal of flood coolants has risen over the years, in part due to increasing federal, state, and local regulations aimed at worker safety and fluid disposal, there has been a growing trend to utilize methods requiring less metalworking fluid to reduce cost, protect the environment, and improve and protect worker health, without sacrificing productivity and quality.

A metalworking lubricant should impart sufficient lubricity between the tool and the workpiece to cause a significant reduction in friction to occur. BOELUBE® is a technologically advanced lubricant that significantly reduces friction (one of the major elements in generating heat during the material removal process).

In near dry machining the goal is high efficiency, which is achieved as a result of using a minimal quantity of lubricant. Because minimal quantities are used and consumed for the most part in the machining process, BOELUBE® Solids produce near dry workpieces and chips with little or no clean-up or related costs and no disposal costs.



BOELUBE® Solids come in a variety of shapes and sizes to accommodate ease of application in drilling, reaming, abrasive belts, deburring, grinding wheels, band, circular and hand saw blades.

Typically the BOELUBE solid is applied to the tool before use. In a block or tube form, it can be hand-held and a drill bit can be touched to the solid before drilling or the solid may be swiped across the surface to be drilled. Only a minimal amount is required when drilling through thin material.

Drilling is one of the most widely used machining processes to produce circular holes in metallic and nonmetallic materials. A drill is a rotary end-cutting tool, with the most common type being the twist drill. The drill, attached to either a stationary machine or hand held, is used to originate or enlarge a hole in a solid material.

COST SAVINGS ■■■

Cost savings are derived through longer tool life, better surface finish, increased productivity, reduction in lubricant usage and subsequent cleaning and disposal costs, reduced environmental impact, and improved housekeeping.

WORKER FRIENDLY ■■■

Manufactured from personal care ingredients, BOELUBE® is dermal non-irritant and biodegradable. Minimal lubricant usage reduces worker exposure.



The Orelube Corporation

Specialty Industrial Lubricants Since 1958

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