Orelube®

technical information

BOELUBE® 70105

SYNTHETIC WATER SOLUBLE MACHINING FLUID

BOELUBE® 70105 is non-toxic synthetic clear microemulsion providing the superior lubricity of BOELUBE®, that when diluted with water, will form a white emulsion that is effective for machining many types of materials. BOELUBE® 70105 will provide excellent lubrication properties leading to better finish and longer tool life.

BOELUBE® 70105 provides effective cooling and cleanliness enabling open, free grinding. Parts and machinery are protected from rust and corrosion, and machine tool operators will appreciate its mild alkalinity.

BOELUBE® 70105 Water Soluble Fluid has low foaming characteristics, and will not leave a tacky residue on machinery or machined parts. Parts are easily cleaned with cold water.

RECOMMENDED DILUTIONS

❑ General Machining	15:1 – 20:1
❑ Reaming/Tapping	10:1 – 20:1
❑ Broaching	10:1 – 15:1
❑ Grinding	15:1 – 25:1

BLENDING INSTRUCTIONS

- ❑ Reservoir must be free of all residues from prior coolants
- ❑ Fill tank with proper amount of BOELUBE® 70105
- ❑ Add water and mix thoroughly

The Orelube Corporation certifies that all the ingredients in BOELUBE® are listed on TSCA, and that BOELUBE® does not contain Silicone, Petroleum, Phenols, Nitrites, Sulfur, Chlorine, Phosphorus and Heavy Metals whether added or present in any of its ingredients. None of the ingredients contained in this mildly alkaline product are classified as potentially hazardous waste.

DISPOSAL OF USED MIXES

- ❑ Skim the floating tramp oil.
- ❑ Neutralize to pH 7.0 by adding muriatic, hydrochloric or citric acid.
- ❑ Add a small amount of acid at a time, and check your progress by using pH indicator paper.
- ❑ When you reach pH 7.0, check the requirements of your local sanitary district for the proper disposal of watery waste effluent.

ENVIRONMENTAL

- ❑ Biochemical Oxygen Demand (BOD_5) – 325,000 mg/g
- ❑ Chemical Oxygen Demand (COD) – 796,000 mg/Kg

TYPICAL PROPERTIES

❑ pH (Neat)	9.4
❑ pH (5%)	8.4
❑ Copper Corrosion,	
❑ 3 hrs. @ 100 C	1a
❑ Cast Iron Chip Test,	
❑ @ 1 hr.	No Rust
❑ @ 3 hrs.	No Rust
❑ @ 6 hrs.	No Rust
❑ @ 24 hrs.	No Rust
❑ Corrosion Test (5%), 48 hrs.	
❑ Al	No Color Change
❑ Cu	No Color Change
❑ Fe	No Color Change
❑ Foam Test (10%)	10-0-0

REFRACTOMETER READING

(% Product)

❑ 5.0%	2.3
❑ 8.0%	3.9
❑ 10.0%	4.9
❑ 12.0%	5.9
❑ 15.0%	7.2

EFFECT OF pH

❑ 10 –11	Dermatitis
❑ 8.3 – 9.6	Optimum Performance
❑ 7	Rust
❑ 6	Decreased Tool Life

EFFECTS OF BACTERIA / FUNGUS (Check Fluid Weekly for any Signs of Growth or Odor)

- ❑ Machine and Tool Staining
- ❑ Decrease in pH
- ❑ Odor
- ❑ Rust
- ❑ Clogged Filters
- ❑ Decreased Coolant Life

Revised 090415