

# LACTUCA MS 5000-S



METALWORKING  
LUBRICATION



Bio-resistant macro-emulsion for machining copper alloys and mild steels

## APPLICATIONS

Soluble oil for mild  
steels and copper alloys

Rust preventive

- **LACTUCA MS 5000-S** is a macro-emulsion containing an effective biocide. It is specifically designed for the conventional machining of copper alloys and screw cutting brasses. It is also fully satisfactory for all processes involving fine carbon steels. Recommended proportions: 3 to 6 %.
- Temporary protection of mechanical parts, machined or not, where easy removal of the rust preventive is required.

## SPECIFICATION

ISO 6743/7 Category L MAA

## ADVANTAGES

Very easy to use

Excellent resistance to  
bacterial growth

- Very easy to use: simply pour **LACTUCA MS 5000-S** into good quality water.
- Forms stable emulsion
- Excellent resistance to bacterial growth
- Good corrosion resistance of machined parts
- Excellent anti-foaming properties.
- Non-staining

## CHARACTERISTICS

TYPICAL CHARACTERISTICS LACTUCA MS 5000-S	
Color ASTM D 1500	4.45
Viscosity at 40 °C, cSt ASTM D 445	23.2
Specific gravity @ 60/60°F ASTM D 1298	0.887
Flash point, COC, °F (°C) ASTM D 92	395 (203)
Emulsion stability, 24 hr modified ASTM D 3707	Slight ring - no oil Slight ring - no oil
A. 5% oil in distilled water	
B. 5% oil in 340 ppm CaCO <sub>3</sub>	
Pour point, °F (°C) ASTM D-97	+10 (-12)

## HANDLING OPERATIONS-HEALTH & SAFETY

**LACTUCA MS 5000-S** contains no chlorine, nitrites, phenol or PTBB, NPE, DEA. It is produced from virgin, solvent-refined base oil, and has a distinctive odor due to the biocide.

TOTAL Lubricants USA, Inc.