

# NU SOL<sup>®</sup> ALUMAX 87

METALWORKING FLUID FOR NON-FERROUS METALS/EXOTIC ALLOYS

## ▷ PRODUCT DESCRIPTION

**NuSol<sup>®</sup> Alumax 87** is a chlorinated semi-synthetic metalworking fluid used for the machining of non-ferrous metals and exotic alloys. NuSol Alumax 87 is formulated for all machining operations on all metals but is specifically designed to machine today's tougher non-ferrous and aluminum alloys. NuSol Alumax 87 is manufactured using a proprietary blending process that incorporates many unique characteristics into the product that will promote high productivity rates and minimal downtime for the end user.

NuSol Alumax 87 is formulated using a blend of unique preformed emulsions that possess a very small particle size, which demonstrate outstanding hydrodynamic lubrication for high-speed machining. This small particle size provides a very durable and uniform lubricant film, enhanced wetting and coverage, a very clean running fluid, and exceptional hard water stability for enhanced machining performance on non-ferrous and aluminum alloys. NuSol Alumax 87 preformed emulsions are further complemented with synthetic boundary lubricant agents, which offer enhanced wetting, film strength, and balanced lubrication. NuSol Alumax 87 also contains preformed chlorinated emulsion for additional lubrication demands.

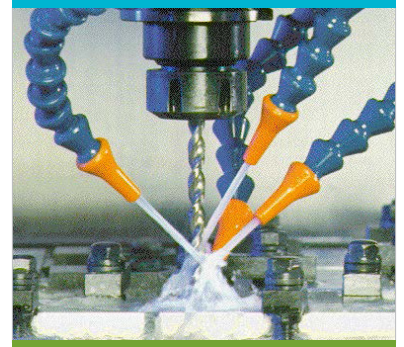
## ▷ FEATURED BENEFITS

- Resistant to "Monday Morning Odors." The biostable chemistry maintains the pH, eliminating objectionable odors
- Excellent corrosion protection for all tooling, equipment, and parts
- Exceptional lubricant film strength for good tool life and finish on all metals
- Extremely small particle size for superior wetting and coverage on all metals
- Excellent hard water stability
- High degree of cleanliness and a low VOC for operator acceptance
- Fortified with chlorine for extreme pressure lubrication and the toughest of machining operations
- Excellent rejection of process oils and system contaminants
- Low foaming

## ▷ APPROVALS

- Super-compliant for California SCAQMD Rule 1144

## APPLICATION



### COMPATIBLE METALS

Aluminum  
Titanium  
Inconel  
Bronze  
Copper  
Brass

### MACHINING CAPABILITIES

Milling  
Turning  
Sawing  
Drilling  
Reaming  
Tapping  
OD/ID/Centerless Grinding  
Burnishing  
Light Duty Hobbing & Broaching  
Medium-Duty Stamping & Drawing

### HIGH PRESSURE COOLANT CAPABILITY

Yes

### ALL METAL SAFE

Yes

### REFRACT INDEX

2.9





## TYPICAL PROPERTIES

Fluid Type	New technology, semi-synthetic metalworking fluid
Appearance	White, translucent emulsion
Odor	Mild
Specific Gravity, 60°F (15.6°C)	1.024
Weight, 60°F (15.6°C)	8.53 lbs/gal.
pH (10% dilution)	9.20
Biostability	Excellent
VOC, ASTM E 1868	50.0 grams/liter

## PRODUCT APPLICATION / USAGE

NuSol Alumax 87 is recommended for general purpose machining of aluminum alloys, nonferrous and aluminum alloys, and tougher exotic alloys (both non-ferrous and ferrous).

Operation	Aluminum Alloys	Copper and Brass	Ferrous Alloys
Milling, Drilling, Turning	8 – 12%	7 – 10%	8 – 14%
Reaming, Light Duty Broaching, Milling, Tapping, Sawing	8 – 14%	7 – 11%	9 – 15%
Grinding: I.D., O.D.	5 – 7%	5 – 7%	6 – 8%

## MIXING DATA

NuSol Alumax 87 metalworking fluid is to be mixed with water for use. Always add product concentrate to the water, not water to product concentrate. Add with mild agitation. Product concentration can easily be monitored by refractometer.

Concentration	12.5%	10.0%	7.5%	5.0%	2.5%
Refractometer Reading	5	4	3	2	1

## PRODUCT CODE

2702400000

## HEALTH AND SAFETY

For health and safety guidance, please refer to the Chemtool SDS (Safety Data Sheets).