

NUSOL® 21 PREEMINENT CP

METAL WORKING FLUIDS
Technical Data Sheet

NEW TECHNOLOGY HYBRID METALWORKING FLUID SOLUBLE OIL REPLACEMENT: ENHANCED CORROSION INHIBITION

PRODUCT DESCRIPTION

NuSol® 21 Preeminent CP is a completely new technology that Chemtool Incorporated is introducing to the metalworking industry. NuSol® 21 Preeminent CP is like no other metalworking fluid on the market today. NuSol® 21 Preeminent CP is manufactured using a proprietary process that incorporates many unique characteristics into the product which promote very high productivity and minimal downtime for the end user.

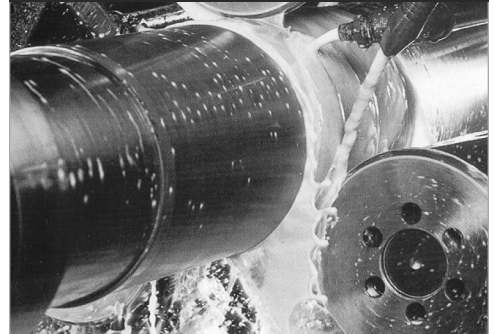
NuSol® 21 Preeminent CP is formulated using a unique preformed emulsion of very small and stable particle size (average particle size of one micron). This preformed emulsion (based upon a high viscosity, high molecular weight, hydrocarbon base stock) provides superior boundary lubrication. The small particle size provides a very durable and uniform lubricant film, enhanced cooling, a very clean running fluid, and exceptional hard water stability.

NuSol® 21 Preeminent CP is an excellent replacement for soluble oil applications, including quenching fluids, machining operations, and forming fluids. NuSol® 21 Preeminent CP is formulated with enhanced corrosion inhibition for both ferrous and non-ferrous alloys. In addition, it offers excellent biostability properties for a soluble oil replacement. NuSol® 21 Preeminent CP offers general lubrication for ferrous applications and should be evaluated for select non-ferrous metal machining applications.

FEATURED BENEFITS

- Will not produce "Monday Morning Odors." The biostable chemistry maintains the pH eliminating objectionable odors.
- Excellent corrosion protection for all tooling, equipment, and parts.
- Exceptional lubricant film for good tool life and quality finishes.
- Extremely small particle size for superior wetting and excellent hard water stability.
- High degree of cleanliness and low reportable VOC's for operator acceptance.
- Excellent replacement for soluble oil quenching fluids and machining fluids.
- High molecular oil preformed emulsion for excellent boundary lubrication.
- Low VOC value of only 43.1 g/l.
- Higher viscosity oils offer improved boundary lubrication without heavy oil content limiting coolant carry-off and providing a cleaner machine interior.
- High flash point oils eliminate mist and evaporation that reduces coolant cost and promotes a healthy work environment.
- Proven history of being operator safe.
- Tramp oil rejection eliminates a source for bacteria and rancid odors that reduces sump change outs, disposal costs, and machine downtime.

PRODUCT APPLICATION



COMPATIBLE METALS

Cast Iron
Carbon Steel
Tool Steel
Stainless Steel
Aluminum
Titanium
Inconel
Bronze
Copper
Brass

MACHINING CAPABILITIES

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

HIGH PRESSURE COOLANT CAPABILITY

Yes

ALL METAL SAFE

Yes

REFRACT INDEX

2.8

PRODUCT SPECIFICATIONS

Fluid Type	New technology metalworking fluid
Appearance	Off-white, translucent emulsion
Odor	Mild odor
Specific Gravity, 60°F (15.6°C)	1.032
Weight, lb/gal., 60°F (15.6°C)	8.60
pH (10% dilution)	9.50
Biostability	Excellent

PRODUCT APPLICATION / USAGE

NuSol® 21 PREEMINENT CP is recommended for general purpose and high performance machining and grinding of ferrous and non-ferrous alloys.

Operation	Carbon Steels, Cast Iron	High Alloy Steels	Aluminum Alloys
Milling, Drilling, Turning	6%	6 – 9%	6 – 10%
Reaming, Light Duty Broaching, Milling, Tapping, Sawing	6 – 9%	6 – 12%	6 – 14%
Grinding: I.D., O.D.	6%	6 – 8%	6 – 7%

MIXING DATA

NuSol® 21 PREEMINENT CP metalworking fluid is to be mixed with water for use. Always add product concentrate to the water, not water to product concentrate. Product concentration can easily be monitored by refractometer.

Concentration	20.0%	17.5%	15.0%	12.5%	10.0%
Refractometer Reading	6.7	5.8	5.0	4.15	3.0

AVAILABILITY

275 Gallon Tote	27089B0000-CT2G27
55 Gallon Drum	27089B0000-CT3G27
5 Gallon Pail	27089B0000-CT5G27
Bulk Quantity	

HEALTH AND SAFETY

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



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