## NUSOL® 27 HP

# NEW TECHNOLOGY METALWORKING FLUID FOR ALL METALS PAG BASED: FORMALDEHYDE FREE TECHNOLOGY

### PRODUCT DESCRIPTION

**NuSol® 27 HP** is a completely new technology that Chemtool Incorporated is introducing to the metalworking industry. NuSol® 27 HP is like no other metalworking fluid on the market today. NuSol® 27 HP is manufactured using a proprietary process that incorporates many unique characteristics into the product that promote very high productivity and minimal downtime for the end user. NuSol® 27 HP is formulated utilizing a blend of unique preformed emulsions of very small and stable particle size (average particle size of one micron). This small particle size provides a very durable and uniform lubricant film (based upon two synthetic boundary lubricants), enhanced cooling, a very clean running fluid, and exceptional hard water stability. The incorporation of this leading edge PAG technology enables NuSol® 27 HP to exhibit superior lubrication comparable to existing synthetic technologies with the advantages of superior surface cleanliness, improved deposit control, and outstanding hydrolytic stability.

NuSol® 27 HP exhibits desirable residues on machined parts and system surfaces. An enhanced biostability package incorporating the newest and safest technologies prevents bacterial and fungal growth resulting in longer sump life. NuSol® 27 HP is completely formaldehyde free. NuSol® 27 HP International totally rejects tramp oils, which can be easily removed with standard oil removal systems. NuSol® 27 HP is an extremely versatile product and offers outstanding performance in both stand-alone and central systems. NuSol® 27 HP is also completely compatible with other Chemtool NuSol® fluids and can be added over the top of existing fluids rather than removing and disposing of current fluids in use.

### **FEATURED BENEFITS**

- · Excellent corrosion protection for all tooling, equipment, and parts
- $\,\cdot\,\,$  Exceptional lubricant film for good tool life based upon synthetic technologies
- · Extremely small particle size for superior wetting
- Excellent hard water stability and outstanding product selection for fluid recycling systems
- · Formaldehyde free: versatile fluid for all system sizes
- · Outstanding surface cleanliness and deposit control
- · Enhanced thermal stability for high temperature applications and reduced smoking

# 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 Medium-Duty Stamping & Drawing

### HIGH PRESSURE COOLANT CAPABILITY

Yes

### **ALL METAL SAFE**

Yes

#### **REFRACT INDEX**

3.0

PRODUCT SPECIFICATIONS					
Fluid Type	New technology metalworking fluid				
Appearance	White, translucent emulsion				
Odor	Mild				
Specific Gravity, 60°F (15.6°C)	1.036				
Weight, lb/gal., 60°F (15.6°C)	8.64				
pH (concentrate)	10%				
pH (10% dilution)	9.70				
Biostability	Excellent				
Freeze/Thaw	Stable				
Heat Stability	Pass				

### **PRODUCT APPLICATION / USAGE**

NuSol® 27 HP is recommended for general purpose machining and grinding of ferrous and nonferrous alloys.

Operation	Carbon Steels, Cast Iron	Alloy Steels	Aluminum Alloys	
Milling, Drilling, Turning	6 – 9%	7 – 11%	7 – 12%	
Reaming, Light Duty Broaching, Milling, Tapping, Sawing	7 – 9%	8 – 14%	9 – 14%	
Grinding: I.D., O.D.	6 – 8%	6 – 10%	6 – 12%	

### **MIXING DATA**

NuSoL® 27 HP 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 or Chemtool Titration Kit.

Concentration	15%	10%	7%	5%	3%	2%
Refractometer Reading	6.0	4.0	2.8	2.0	1.2	0.9
Drops 0.5N HCL	32	22	15	11	7	5

### **AVAILABILITY**

275 Gallon Tote 55 Gallon Drum Bulk Quantity 27075Q0000-CT2115 27075Q0000-CT3115

### **HEALTH AND SAFETY**

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



801 W Rockton Road, Rockton, IL 61072

Phone: 815-957-4140 Fax: 815-624-0381 www.chemtool.com