

## S-396 Coolant Concentrate: (Emulsifiable Oil, Chlorine Free)

### FEATURES

- Chlorine Free Extreme Pressure Technology
- Excellent for Aluminum
- High Pressure Capable with Low-Foam
- Long Lasting and Bio-Stable
- Rejects Tramp Oil
- Superior Lubricity Package

### GENERAL DESCRIPTION

S-396 is engineered to provide maximum lubricity while leaving minimum residue. S-396 is especially good for Aluminum machining allowing extreme increases in productivity. Far superior results can be obtained utilizing the S-396 over conventional chlorine free and most chlorinated synthetic, semi-synthetic and soluble oil technologies. In addition, the polar additives have been synthesized to perform at optimum polar intensity.

### APPLICATIONS

Primary		Secondary	
Milling	Tapping	Boring	Plunge Form Grinding
Reaming	Threading	Forming	Punching
Sawing	Turning	Grinding	Stamping

### MATERIALS

Primary		Secondary	
Aluminum	Precious Metals	Plastic	Titanium

### INSTRUCTIONS

Always premix coolant before adding to the machine sump. When mixing coolant by hand it is important to always add the concentrate to the water and then agitate. For best results, a Hangsterfer's recommended proportioning unit should be used. To maintain recommended concentration, make-up should be added at half the desired concentration. Always check concentration with a Refractometer. To maintain 6%: first charge the machine at 6%, then, as needed, add make-up as much as 3%. Avoid adding straight water or concentrate directly to the machine.

OPERATION	CONCENTRATION		
	%	Ratio Concentrate: Water	Refractometer
General Cutting	5 - 10	1:20 – 1:10	4.5 - 9
Severe Cutting	10 - 20	1:10 – 1:5	9 - 18
General Grinding	2.5 - 5	1:40 – 1:20	2.3 – 4.5

## MAINTENANCE

S-396 is a bio-stable coolant, designed to control the growth of bacteria. Regular maintenance is required for maximum performance. Concentration should be monitored regularly with a calibrated refractometer. Tramp oils should be removed from the coolant surface regularly to prevent unwanted bacterial growth. Keep the coolant system free of cleaners, solvents and other contaminants.

## PRODUCT CHARACTERISTICS

Product Name: S-396		Concentration Dilution Table		
Form	Liquid			
Color	Golden			
Odor	Mild	%	<i>Ratio</i> Concentrate: Water	Refractometer
Specific Gravity	0.95	20	1:5	18
Viscosity: SUS @ 100°F	323	15	1:7	13.5
cSt @ 40°C	71	10	1:10	9
Flash Point, COC, °F/°C	>212/100	7.5	1:13	6.8
Fire Point, COC, °F/°C	>212/100	5	1:20	4.5
Pour Point, °F/°C	<40/4	4	1:25	3.6
Solubility in Water	100%	3	1:33	2.7
Boiling Point, °F/°C	212/100	2.5	1:40	2.3
Vapor Pressure, mm Hg @ 25°	<0.01	2	1:50	1.8
pH@ 10%	8.9	1	1:100	0.9

Refractive Index Multiplier = 1.1

## WASTE TREATMENT

Dispose of in accordance with local, state, federal and international laws. If and when it is necessary to dispose of waste fluids, the amount of waste can be greatly reduced by separating the water from the oil and contaminants which accumulate through normal machining. You can often reduce your waste disposal by more than 80% through conventional methods such as Ultra-Filtration, Chemical Treatment, or Evaporation. After approval by your local, state, or federal authorities, the waste water may be sent to the sewer or discharged into waters, and the separated oils may be removed for recycling, sale or disposal.

## SHIPPING UNITS

All Hangsterfer's products are available in pails, drums and Intermediate Bulk Containers (275 or 330 gallons). All products are distributed worldwide.

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