

## S-500® Coolant Concentrate: Water Soluble Oil

### FEATURES

- Extended Sump Life
- Extreme pressure technology
- General Purpose
- Long Lasting And Bio-Stable
- Maximizes Tool Life Extended Sump Life
- Non-Hazardous
- Non- Irritating
- Non-Toxic

Approved by Pratt & Whitney

### GENERAL DESCRIPTION

The first choice for general machining for all metals and non-traditional materials. The EP properties produce excellent results over a broad range of manufacturing condition. This general purpose product satisfies some of the most demanding manufacturing operations from stamping, milling and turning processes. Amine free and safe on all materials while providing the best finishes and tool life on aluminum, steel to stainless steel.

### APPLICATIONS

Primary		Secondary	
Blanchard	Reaming	Broaching	Forming
Drilling	Stamping	Burnishing	Surface Grinding
Milling	Turning	Creep Feed Grinding	ID/OD Grinding

### MATERIALS

Primary		Secondary	
Aluminum	Chromium Alloys	Brass	Bronze
High Temp Alloys	Molybdenum	Ceramics	Copper
Nickel Alloys	Plastics	Graphite	Glass
Powdered Metals	Precious Metals	Refractory Metals	Steel
Stainless Steel	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 one-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 Grinding	5	1:20	5
General Machining and Turning	7.5	1:13	7.5
Grinding with aggressive feed rates	10	1:10	10
Drilling, Tapping, Reaming	10	1:10	10
Light Stamping and Forming	10	1:10	10

## MAINTENANCE

S-500 is a biostable coolant, designed to control the growth of bacteria. Regular maintenance is required for maximum performance. Concentration should be monitored regular with a calibrated refractometer. S-500 gives a direct read on the refractometer (E.G. 5=5%).

## PRODUCT CHARACTERISTICS

Product:: S-500		Concentration Dilution Table		
Form	Liquid			
Color	Green			
Odor	Mild			
Specific Gravity	0.96	%	Ratio Concentrate: Water	Refractometer
Viscosity: SUS @ 100°F	<b>288</b>	20%	1:5	20
cSt @ 40°C	<b>62</b>	15%	1:7	15
Flash Point, COC, °F/°C	340/170	10%	1:10	10
Fire Point, COC, °F/°C	345/173	7.5%	1:13	7.5
Pour Point, °F/°C	<0/-18	5%	1:20	5
Solubility in Water	100%	4%	1:25	4
Boiling Point, °F/°C	289/143	3%	1:33	3
Vapor Pressure, mm Hg @ 25°	<0.01	2.5%	1:40	2.5
pH @ 10%	9.1	2%	1:50	2
Chlorine	Added as ED Additive	1%	1:10	1

Refractive Index Multiplier = 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 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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