

## S-555® (Coolant Concentrate: Water Soluble Oil)

### FEATURES

- Chlorine Free Extreme Pressure Technology
- Excellent Corrosion Protection
- Excellent Sump Life
- General Purpose
- Long Lasting, Bio-Stable
- Maximizes Tool Life
- Non-Hazardous, Non-Toxic
- Non-Irritating

**S-555 is approved by Lockheed Martin Corp.**

### GENERAL DESCRIPTION

**S-555** is an excellent choice for general machining of all metals and materials. Especially materials that are prone to attack by water or sulfur, such as aerospace aluminums, copper, copper alloys (including brass), and magnesium. The EP properties produce excellent results over a broad range of manufacturing conditions. This product satisfies some of the most demanding manufacturing operations from stamping, to milling and turning processes. **S-555's** formula allows for easy recycling and is extremely operator friendly. **S-555** is safe on all materials while providing the best finishes and tool life including, aluminum, steel and stainless steel.

### APPLICATIONS

Primary			Secondary	
Blanchard	Milling	Stamping	Burnishing	Forming
Drilling	Reaming	Turning	Broaching	

### MATERIALS

Primary		Secondary	
Aluminum	Magnesium	Ceramics	Glass
Brass	Molybdenum	Graphite	Powdered Metals
Bronze	Precious Metals	Stainless Steel	Refractory Metals
Copper	Steel	Plastics	

### 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-555** 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. **S-555** gives a direct read on the refractometer (E.G. 5=5%).

## PRODUCT CHARACTERISTICS

Product Name: <b>S-555</b>		Concentration Dilution Table		
Form	Liquid			
Color	Green			
Odor	Mild			
Specific Gravity	0.92 - 0.95	%	<b>Ratio</b> Concentrate: Water	Refractometer
Viscosity: SUS @ 100°F	137 - 196	20%	1:5	20
cSt @ 40°C	29 - 42	15%	1:7	15
Flash Point, COC, °F/°C	329 / 165	10%	1:10	10
Solubility in Water	100%	4%	1:25	4
Vapor Pressure, mm Hg @ 25°	<0.01	2.5%	1:40	2.5
pH @ 10%	8.8 - 9.4	2%	1:50	2
Chlorine	0%	1%	1:10	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 gallons). All products are distributed worldwide.

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