

Research, Development & Manufacturing of Metalworking Lubricants

S-555

Water Soluble Oil Concentrate

## **GENERAL DESCRIPTION**

Hangsterfer's S-555 is the first choice in performance oriented soluble oils. This premium grade coolant is designed to provide excellent results in a broad range of applications. The biostable formula offers extended sump life, reduced coolant consumption and minimal waste. The chlorine free, non-hazardous formulation is designed for continuous use recycling systems and allows for easier waste disposal.

## **APPLICATION**

S-555 combines a high mineral oil content with advanced synthetic Extreme Pressure (EP) additives to deliver the maximum in tool life and surface finish results on all general machining applications. S-555 is especially suitable for materials that are prone to attack by water or sulfur, such as aerospace aluminums, copper, copper alloys (including brass) and magnesium. The EP additives and inherent lubricity also allow for excellent performance on stainless steels, nickel alloys, high carbon steels and titanium.

Operation	Concentration
General Machining	5% – 10%
Grinding	4% – 6%
Stamping	5% – 15%
Forming	10% – 15%

MATERIALS								
Primary		Secondary						
Aluminum Alloys	Magnesium	Nickel Alloys	Tungston					
Brass & Bronze	Copper & Copper Alloys	Steels: Bhn up to 450	Titanium					

## MIXING INSTRUCTIONS & MAINTENANCE

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, 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. To maintain 6%: first charge the machine at 6%, then as needed add make-up at 3%. Never add straight water or concentrate directly to machine.

S-555 is a biostable 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%). 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.

toll free North America: +1-800-433-LUBE

PRODUCT CHARACTERISTICS:	S-555			
Form	Liquid		Concentration Dilution Table	
Color	Green	Concentration Dilution Table		
Odor	Mild	%	Ratio	Refractometer
Specific Gravity	0.93	20%	1:5	20
Viscosity: SUS @ 100°F	155	15%	1:7	15
cSt @ 40°C	33	10%	1:10	10
Flash Point, COC, °F/°C	329 / 165	7.5%	1:13	7.5
Fire Point, COC, °F/°C	354 / 179	5%	1:20	5
Pour Point, °F/°C	<0 / -18	4%	1:25	4
Solubility in Water	100%	3%	1:33	3
Boiling Point, °F/°C	399 / 204	2.5%	1:40	2.5
Vapor Pressure, mm Hg @ 25°	<0.01	2%	1:50	2
pH @ 10%	9.1	1%	1:100	1

## SHIPPING UNITS

S-555 is available in 5 gallon, 55 gallon and Intermediate Bulk Containers (275 or 330 gallons). All products are distributed worldwide.

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