

Research, Development & Manufacturing of Metalworking Lubricants

S-506<sup>®</sup> CF (Coolant Concentrate: Water Soluble Oil)

# **FEATURES**

- Chlorine Free Extreme Pressure Technology
- Excellent Sump Life
- General Purpose
- Long Lasting And Bio-Stable

- Maximizes Tool Life
- Non-Hazardous, Non-Toxic
- Non-Irritating
- Helps Prevent Residue Build-up

#### GENERAL DESCRIPTION

**S-506 CF** is an excellent choice for general machining for all metals and non-traditional materials. The EP properties produce excellent results over a broad range of manufacturing conditions. This general-purpose product satisfies some of the most demanding manufacturing operations from stamping, milling and turning processes. **S-506 CF** has extra detergent action where coolant contamination and poor water is un-avoidable. **S-506 CF** is safe on all materials while providing the best finishes and tool life on aluminum, steel to stainless steel.

APPLICATIONS						
Primary		Secondary	Secondary			
Blanchard	Reaming	Burnishing	Forming			
Drilling	Stamping	Broaching	Surface Grinding			
Milling	Turning	Creep Feed Grind	ling			

MATERIALS						
Primary		Secondary				
Aluminum	Plastics	Brass	Glass			
Chromium Alloys	Powdered Metals	Bronze	Graphite			
High Temp Alloys	Precious Metals	Ceramics	Refractory Metals			
Molybdenum	Steel	Copper	Stainless Steel			
Nickel Alloys	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.

# MAINTENANCE

**S-506 CF** 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-506 CF** gives a direct read on the refractometer (E.G. 5=5%).

Mantua, New Jersey 08051 United States of America

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

PRODUCT CHARACTERISTICS						
Product Name: S-506 CF			Concentration Dilution Table			
Form	Liquid		%	<b>Ratio</b> Concentrate: Water	Refractometer	
Color	Green		20%	1:5	20	
Odor	Mild		15%	1:7	15	
Specific Gravity	0.92 - 0.95		10%	1:10	10	
Viscosity: SUS @ 100°F	154 - 187		7.5%	1:13	7.5	
cSt @ 40°C	33 - 40		5%	1:20	5	
Flash Point, COC, °F/°C	324 / 162		4%	1:25	4	
Solubility in Water	Soluble in Water		3%	1:33	3	
Vapor Pressure, mm Hg @ 20°C	<0.01		2.5%	1:40	2.5	
pH @ 10%	8.9 - 9.3		2%	1:50	2	
Chlorine	0%		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 gallons). All products are distributed worldwide.

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