

S-1001 *Heavy Duty Water Soluble Oil Concentrate*

GENERAL DESCRIPTION

Hangsterfer's S-1001 is the first choice in heavy-duty performance oriented soluble oils. This premium grade coolant is designed to provide excellent results in difficult applications in a production environment. The biostable formula offers extended sump life, reduced coolant consumption and minimal waste. This makes S-1001 ideal for continuous use recycling systems. Operator safety and machine components are not compromised, as S-1001 is both non-toxic and non-corrosive.

APPLICATION

S-1001 combines highly refined mineral oils with advanced Extreme Pressure additives to deliver the maximum in tool life and surface finish during all severe machining applications and many forming applications. It was formulated for difficult machining and finish intensive operations involving all materials, especially from the following groups: stainless steels, nickel alloys, titaniums, aluminums and hardened steels. S-1001 is non-staining and non-corrosive therefore compatible with most materials.

Operation	Concentration
General Machining	8% - 12%
Grinding	7% - 9%
Stamping	7% - 15%
Forming	10% - 15%

MIXING 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, 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.

MAINTENANCE

S-1001 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-1001 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.

PRODUCT CHARACTERISTICS S-1001	
Form	Liquid
Color	Green
Odor	Mild
Specific Gravity	1.03
Viscosity: SUS @ 100°F	395
cSt @ 40°C	85
Flash Point, COC, °F/°C	320 / 160
Fire Point, COC, °F/°C	370 / 187
Pour Point, °F/°C	<0 / -18
Solubility in Water	100%
Boiling Point, °F/°C	>284 / 140
Vapor Pressure, mm Hg @ 25°	<0.01
pH @ 10%	9.3
Total Sulfur	0.0%
*Chlorine	12%
Phosphorus	0.0%
Solvent Content	0.0%
Solids Content	0.0%
Silicone	0.0%

TOXICOLOGY
Product Information

All Hangsterfer's Products are FREE of

- ZINC
- PCB'S
- VOC'S
- BORON
- NITRITE
- NITRATE
- DIETHANOLAMINE (DEA)
- OZONE DEPLETING CHEMICALS

WASTE TREATMENT

All Hangsterfer's soluble oils are designed for easy waste treatment. By separating the water phase from the oil and various contaminants, which accumulate through normal machining, you can reduce your waste disposal by 80%-90%. Hangsterfer's recommends Ultra Filtration or Chemical Treatment for removal of fats, oils, greases and heavy metals prior to disposal of the water phase. Following approval by your local authorities, your wastewater stream may be sewerred and waste oils removed for recycling or disposal.

SHIPPING UNITS

All Hangsterfer's products are available in 5 gallon, 55 gallon and Intermediate Bulk Containers (260 or 330 gallons). All products are distributed worldwide.

Revised 03/9/01

The general description, recommended uses, application data and statements in the product literature are guidelines. Because this product may be used for a variety of applications over which Hangsterfer's Laboratories, Inc. has no control, Hangsterfer's Laboratories, Inc. assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence.

