

R-100 *Synthetic Coolant Concentrate*

GENERAL DESCRIPTION

Hangsterfer's R-100 is a full synthetic machining and grinding coolant. The transparent biostable formula offers extended sump life, reduced coolant consumption and minimal waste. R-100 is free of oil and grease while remaining transparent in both hard and soft water. It provides a unique cleaning action to help reduce wheel loading and leaves behind a thin corrosion inhibiting film. It does not contain nitrite, nitrate, DEA or MEA.

APPLICATION

R-100 is blended to provide maximum efficiency when machining and grinding a wide variety of materials including ferrous and non-ferrous. It is used successfully in all types of grinding applications including Blanchard, surface, centerless, cylindrical, creep feed, form, tool and cutter grinding. R-100 is an excellent choice for general machining when a mineral oil free coolant is desired.

It is recommended to use R-100 at a minimum of 3%, but for most applications 5-7% is most common. The rust prevention properties make R-100 perfect for tumble-style deburring and as a post-aqueous cleaning rust inhibitor.

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. Never add straight water or straight concentrate directly to the machine. It is best to add a dilution equal to half the recommended concentration in order to maintain fluid volume in the machine. For example, a 3% make-up concentration will be necessary to maintain a 6% concentration.

MAINTENANCE

R-100 is biostable and is designed to control the growth of bacteria and fungi without needing tank side additives. Regular maintenance is suggested for maximum performance. Concentration should be monitored regularly with a calibrated refractometer. The refractometer reading needs to be multiplied by 4 in order to determine the actual concentration (e.g. 1 on refrac. =4.0%). 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 R-100	
Form	Liquid
Color	Amber
Odor	Mild
Specific Gravity	1.04
Viscosity: SUS @ 100°F	32
cSt @ 40°C	2
Flash Point, COC, °F/°C	Non-Flammable
Fire Point, COC, °F/°C	Non-Flammable
Pour Point, °F/°C	15 / -9
Solubility in Water	100%
Boiling Point, °F/°C	212 / 100
Vapor Pressure, mm Hg @ 25°	Not Applicable
pH @ 10%	8.9
Sulfur, Active	0.0%
*Chlorine	0.0%
Phosphorus	0.0%
Solvent Content	0.0%
Solids Content	0.0%
Silicone	0.0%

*Hangsterfer's uses only non-hazardous, chemically bound, long chain chlorinated paraffin.

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 synthetic concentrates are designed for easy waste treatment. By separating the water phase from the synthetic fraction 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.

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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.