

## Crystal Cut® 355 (Synthetic Coolant Concentrate)

### FEATURES

- Excellent for Cast Iron
- Excellent Corrosion Control
- Low Odor
- Long Lasting and Bio-Resistant
- Lower Consumption
- Excellent Cleanliness

### GENERAL DESCRIPTION

**Crystal Cut 355** is the best in class full synthetic metal working fluid. **Crystal Cut 355** provides excellent tool life with ceramic, diamond and carbide tools. You can rely on machine cleanliness and corrosion protection without compromising operator Health and Safety. **Crystal Cut 355** has extended sump life without cast iron related problems such as chip clinking.

### APPLICATIONS

Primary		Secondary	
Grinding	Milling	Fin Stamping	Light Stamping
Diamond Tip Turning	Turning	Forming	Polishing
Micro Tooling	Sawing	Hydro Forming	Plunge Form Grinding

### MATERIALS

Primary		Secondary	
Armor Plate	Powder Metal	Aluminum	Ceramics
Cast Iron	Steel	Carbide	Precious Metals

### 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-fourth 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 1.5%. Avoid adding straight water or concentrate directly to machine.

OPERATION	CONCENTRATION		
	%	Ratio Concentrate: Water	Refractometer
General Machining	4 - 8	1:25 – 1:12.5	1.20 – 2.40
Heavy Duty Machining	8 - 12	1:12.5 – 1:8	2.40 – 3.60
General Grinding	4 - 6	1:25 – 1:16.5	1.20 – 1.81
Heavy Duty Grinding	6 - 8	1:16.5 – 1:12.5	1.81 – 2.40
Stamping and Forming	4 - 12	1:25 – 1:8	1.20 – 3.60

## MAINTENANCE

**Crystal Cut 355** is a bio-resistant synthetic designed to control the growth of bacteria and fungus. Regular maintenance is required for maximum performance. Concentration should be monitored regularly with a calibrated refractometer. The refractometer reading needs to be multiplied by 3.33 in order to determine the actual concentration (e.g. 2.25 on the Refractometer = 9%). Tramp oils should be removed from the coolant surface regularly to help reduce bacterial growth. Keep the coolant system free of cleaners, solvents, and other contaminants.

## PRODUCT CHARACTERISTICS

Product Name: <b>Crystal Cut 355</b>		Concentration Dilution Table		
Form	Liquid	%	<i>Ratio</i> Concentrate: Water	Refractometer
Color	Golden	10%	1:10	3.60
Odor	Mild	9%	1:11	2.70
Specific Gravity	1.00 - 1.02	8%	1:12.5	2.40
Viscosity: SUS @ 100°F	37 - 43	7%	1:14	2.10
cSt @ 40°C	3 - 5	6%	1:16.5	1.81
Flash Point, COC, °F/°C	Non-Flammable	5%	1:20	1.50
Fire Point, COC, °F/°C	Non-Flammable	4%	1:25	1.20
Solubility in Water	Soluble	3%	1:33	0.90
pH @ 10%	9.4 - 9.6	2%	1:50	0.60
Chlorine	None	1%	1:100	0.30

**Refractive Index Multiplier = 3.33**

## 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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