

Research, Development & Manufacturing of Metalworking Lubricants



Crystal Cut® 155

Synthetic Coolant Concentrate

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#### **FEATURES**

- Excellent Corrosion Control
- Excellent for Cast Iron
- Hydrocarbon Free

- Long Lasting and Bio-Resistant
- Low Foam
- Translucent

# **GENERAL DESCRIPTION**

Crystal Cut 155 is the best in class full synthetic metal working fluid. Crystal Cut 155 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 155 has extended sump life and avoids cast iron related problems such as chip clinkering.

APPLICATIONS						
Primary		Secondary				
Grinding	Sawing	Centerless Grinding	Diamond Tip Turning			
Milling	Tube Mill Manufacturing	Cutting	Turning			

MATERIALS						
Primary		Secondary	Secondary			
Armor Plate	Powdered Metals	Aluminum	Composites			
Cast Iron	Steel	Carbon	Graphite			

### 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-forth 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	7 - 10	1:14 -1:10	1.47 – 2.11	
General Grinding	4 - 6	1:25 – 1:16	0.84 – 1.26	

### **MAINTENANCE**

Crystal Cut 155 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 5.3 in order to determine the actual concentration (e.g. 1.89 on the Refractometer = 10%). 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: Crystal Cut 155		Conce	Concentration Dilution Table			
Form	Liquid	%	Ratio Concentrate: Water	Refractometer		
Color	Colorless	10%	1:10	1.89		
Odor	Mild	9%	1:11	1.70		
Specific Gravity	1.03	8%	1:12.5	1.51		
Viscosity: SUS @ 100°F	6.8	7%	1:14	1.32		
cSt @ 40°C	1.5	6%	1:16.5	1.13		
Flash Point, COC, °F/°C	Non-Flammable	5%	1:20	0.94		
Fire Point, COC, °F/°C	Non-Flammable	4%	1:25	0.75		
Solubility in Water	Soluble	3%	1:33	0.57		
pH @ 10%	9.3	2%	1:50	0.38		
Chlorine	None	1%	1:100	0.19		

**Refractive Index Multiplier = 5.3** 

## **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 (Totes). This product is REACH compliant and is distributed worldwide.

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