HANGSTERFER'S

Research, Development & Manufacturing of Metalworking Lubricants

Crystal Cut[®] 355 syn

Synthetic Coolant Concentrate

FEATURES

- Excellent for Cast Iron
- Excellent Corrosion Control

- Long Lasting and Bio-Resistant
- Lower Consumption

Low Odor

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 clinkering.

| APPLICATIONS | | | | | | | |
|---------------------|---------|---------------|----------------------|--|--|--|--|
| Primary | | Secondary | 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-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 | 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: Crystal Cut 355 | | Conce | Concentration Dilution Table | | |
|-------------------------------|---------------|-------|-------------------------------------|---------------|--|
| Form | Liquid | % | Ratio Concentrate: Water | Refractometer | |
| Color | Golden | 10% | 1:10 | 3.60 | |
| Odor | Mild | 9% | 1:11 | 2.70 | |
| Specific Gravity | 1.05 | 8% | 1:12.5 | 2.40 | |
| Viscosity: SUS @ 100°F | 31 | 7% | 1:14 | 2.10 | |
| cSt @ 40°C | 5.4 | 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 | |
| рН @ 10% | 9.5 | 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 (Totes). This product is REACH compliant and is distributed worldwide.

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