

7032 SynCut™ FS Heavy

SynCut™ FS Heavy is a heavy duty synthetic coolant designed for difficult machining and grinding applications where clean operation, cooling, and lubricity are essential.

SynCut™ FS Heavy is a synthetic, water-dilutable metalworking coolant intended for heavy duty machining and grinding operations. The product is positioned for customers seeking a Bio-Stable clean-running, coolant that supports effective cooling, sump stability in properly maintained systems. SynCut™ FS Heavy will perform well in a variety applications small or large, from job shop, production facilities, most aerospace and medical applications.

KEY FEATURES AND BENEFITS

- Heavy duty synthetic coolant for enhanced machining and grinding.
- Designed to provide superior cooling and wetting at the tool-workpiece interface.
- Supports clean machine operation and reduced residue when properly maintained.
- Provides lubricity for common metal-removal operations.
- Helps protect workpieces, tooling, and machine surfaces from corrosion.
- Supports stable sump operation when concentration, pH, tramp oil, and contamination are controlled.
- Stable in hard and soft water.
- Non-Chlorinated.
- Provides corrosion protection for workpieces, tooling, and machine surfaces.
- Provides short-term rust protection up to 30:1.
- Promotes excellent surface finish.
- Resists and controls microorganism growth in properly maintained systems.
- Exceptional low foam formula.

RECOMMENDED APPLICATIONS

SynCut™ FS Heavy is suitable for general-purpose medium-duty metalworking operations where a synthetic coolant is preferred over a neat oil or conventional soluble oil.

Typical Operations

- Machining
- Light Grinding
- Drilling
- Milling
- Turning
- Reaming
- Tapping and threading where operation severity is within the fluid's capability

Compatible Work Materials

- Ferrous metals (*Not suitable for cast iron grinding*)
- Carbon steel
- Aluminum and common aluminum alloys
- Mixed-metal environments where concentration and maintenance practices are controlled

RECOMMENDED CONCENTRATIONS

Operation	Suggested Starting Concentration
Grinding	3% to 6%
General machining	8% to 9.5%
More severe operations	8% to 10%, based on operation requirements and field evaluation
Refractive Index Factor	1.94

Always add concentrate to water with agitation. Confirm the final operating concentration using a calibrated refractometer and the applicable product factor when available.

HANDLING, MAINTENANCE, AND SAFETY NOTES

- Consult the applicable Safety Data Sheet before storage, handling, use, or disposal.
- ***Store concentrate in closed containers under clean, dry conditions in a heated warehouse. Do not freeze.***
- Protect from contamination.
- Maintain the coolant concentration within the recommended range to support corrosion control, lubricity, biological resistance, and machining performance.
- Monitor concentration, pH, tramp oil, water hardness, microbial activity, and contamination as part of routine sump maintenance.
- Use appropriate make-up procedures and add concentrate to water, not water to concentrate.
- Dispose of used coolant and waste fluid in accordance with applicable regulations and site procedures.

TYPICAL PROPERTIES

The following values are typical for product positioning and field reference. Final specification limits should be confirmed against the approved laboratory specification before publication.

Product type	Synthetic Coolant
Appearance	Light amber to clear concentrate
Emulsion appearance	Translucent to light emulsion, depending on water quality and concentration
Operating pH	PH at 10% (STL. Tap Water) 9.5 Maintain 8.9 to 9.5 PH Range
Use condition	Dilute with water before use