

TECHNICAL DATA SHEET



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Millcool BioSyn 10

Millcool BioSyn 10 is a fully synthetic, ester-based coolant engineered for the machining of ferrous and non-ferrous alloys. Its ester chemistry delivers outstanding chlorine-free lubricity and strong machining performance, backed by an extremely low-foaming characteristic that holds steady under sustained high-pressure operation. Formulated for durability, Millcool BioSyn 10 provides extended service life even in demanding operating conditions.

Application

Millcool BioSyn 10 is suitable for use in both soft and hard water conditions, resisting the formation of soap deposits without sacrificing its low-foam performance. This stability makes it a dependable choice where coolant systems are run at elevated pressures.

Features & Benefits

- Secondary amine free formulation, supporting a safer working environment for operators.
- Boron free, reducing environmental impact and supporting regulatory compliance.
- Formulated without formaldehyde-releasing biocides, improving operator safety.
- Chlorine and sulphur free, reducing corrosion risk and broadening material compatibility.
- Mineral oil free, providing a cleaner and more sustainable coolant solution.
- Extremely low foaming, keeping performance consistent as system pressures rise.
- Robust chemistry delivers extended service life, even in difficult operating conditions.

Material Suitability:

- Steels
- Aluminium & Aluminium Alloys
- Cast Iron

Machining Operations & Recommended Dilution Rate:

Operation	Recommended Dilution Rate
Turning, Milling & Drilling	5-7%
Tapping & Threading	6-8%
Reaming & Deep Hole Drilling	8-10%

Typical Characteristics	
Emulsion appearance	Translucent
pH at 5% in distilled water	9.8
IP 287 Corrosion break point	2.0%
Refractometer correction factor	2.4
Water hardness limit	25-450ppm