

PRISTA® Synthilin 5

Metalworking fluids

Description and application

Prista® Synthilin 5 is a fully synthetic metalworking fluid concentrate formulated without mineral oil and formaldehyde donors. Its advanced formulation is based on glycols, boric acid, and amines, providing reliable performance and long-term stability during machining operations.

This water-miscible cutting fluid is designed for grinding applications involving steel and cast iron, producing clear, transparent solutions when diluted with water. It provides excellent corrosion protection, effective wear control, and resistance to bacterial growth, ensuring extended fluid life and consistent machining performance.

Prista® Synthilin 5 is also suitable for the processing of a wide range of aluminium and yellow metal alloys, offering versatile application across various metalworking operations.

Benefits

- Compatible with a wide range of water hardness up to 60°dH (1080 ppm)
- Ensures superior cutting tool cooling and detergency
- Forms transparent solutions, which allows excellent visibility of workpieces
- Minimized foaming tendency
- Reliable rust and corrosion protection for ferrous metals
- Designed for use at wide concentration ranges from 5% to 8%
- Resistance to bacteria

Use and applicable operations

	Water-Miscible MWF
Cast iron	Suitable
Steel	Extremely suitable
Yellow metals*	Suitable
Aluminium*	Suitable
Grinding	Suitable
Cutting	Not suitable
Forming	Not suitable
Additional properties: lubricity/ EP	None

*Check in advance the tendency of the alloy to stain
Refractive index – 2.6% per °Brix

Specifications

	Water-Miscible MWF
ISO 6743/7	ISO-L-MAG

Typical characteristics

Parameter	Test Method	Typical Value
Properties of the concentrate: - Appearance - Kinematic Viscosity at 20°C, cSt - Density at 20°C, g/ml - Mineral oil content, %	Visual EN ISO 3104 EN ISO 3675 -	Clear brown fluid 4.0 1.091 0



Properties of water solutions: - Appearance - pH (at 5 %) - Corrosion protection (chip/filter paper test at 4%)	Visual ISO 4316 DIN 51360/II	Transperant solution 9.7 0/0 - no corrosion
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Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

Health, safety and handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

For more information about product's MSDS, terms and conditions for storage and shelf life please visit www.prista-oil.com

Minor variations in color, odor, and appearance may occur due to the selected raw materials; however, they do not affect product performance. Store the fluid in closed, dry warehouses. The concentrate remains stable for up to 12 months when stored at 5°C to 40°C. After opening, keep the concentrate container tightly closed.