



eni Fresia ESB 10

eni Fresia ESB 10 is a cutting oil of high performance formulated with synthetic ester that gives to the product high lubricating properties. It is free of chlorine, sulphur and mineral oil. Appropriated and balanced additives impart to the product high detergent, anti-wear and EP (Extreme Pressure) properties.

CHARACTERISTICS (TYPICAL VALUES)

eni Fresia ESB 10

Appearance			Limpid yellow
Viscosity at 40°C	ASTM D 445	mm ² /s	11.5
Flash Point	ASTM D 92	°C	202
Pour Point	ASTM D 6892-03	°C	-15
Density at 15°C	ASTM D 4052	kg/l	0.880
Copper Corrosion	ASTM D 130		1a
% ester			>90%

PROPRIETY AND PERFORMANCES

eni Fresia ESB 10 is formulated exclusively with synthetic ester. The choice to have a synthetic ester based formulation is to take a great advantage of its polarity and adhesiveness on metal surface in order to create a stable lubricating film.

The presence of strong film of lubricant provides a reduction of friction, efficient removal of heat generated between the tool and workpiece and consequential reduction of smoke with improvement of the workpiece finishing

Due to its inherent lubricity, the ester base oil allows to perform even severe cutting operations without the use of EP additives such as chlorine, sulfur and derivatives.

eni Fresia ESB 10 ensures adequate cleaning and corrosion protection of the workpieces and the machine tool on which it operates.

The ester base oil used in **eni Fresia ESB 10** makes it biodegradable, the value of biodegradability according to the OECD Method 301B, is > 60% p.

APPLICATIONS

eni Fresia ESB 10 is an EP neat cutting oil formulated for medium and severe cutting operations. Particularly suitable for deep drilling, for high-speed cutting operations and at high- pressure, for teeth gears grinding, for production and sharpening of hard metal tools. Recommended for machining of alloy steel and stainless steel, of aluminum and its alloys, of titanium and its alloys and of yellow metals.

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CLASSIFICATIONS

eni Fresia ESB 10 is able to meet the requirements of the following classifications:

- ISO-L-MHE
- WGK 1 class

WARNING:

For reasons of incompatibility and performance, it is recommended not to mix **eni Fresia ESB 10** with cutting-fluids containing chlorine.

In the event of topping up of different product, it is recommended to always perform laboratory compatibility testing.

The **eni** technical assistance service is available for technical support.