



Product Data

Castrol CareCut ES 3 High-performance neat cutting oil

Description

Castrol CareCut™ ES 3 is a chlorine- and heavy metal-free neat cutting fluid based on advanced biodegradable ester technology.

Application

CareCut ES 3 is designed for severe honing and superfinishing of ferrous and non-ferrous materials. It can also be used for grinding applications, drilling and general machining of aluminum, yellow metals, cast iron and medium alloyed steel.

	Cast Iron	Low-medium alloyed steel	High alloyed steel /nickel-chromium alloys	Titanium alloys	Aluminum alloys	Yellow metals
Honing/Superfinishing	✓	✓	✓	-	✓	✓
Grinding	✓	✓	✓	-	✓	✓
Drilling	-	-	-	✓	✓	✓
Broaching/Gear manufacturing	-	-	-	-	-	-
General machining	✓	✓	-	-	✓	✓

Advantages

- Excellent flushing and lubrication properties extend honing stone life and enable high surface finish and dimensional accuracy.
- Low viscosity and excellent wetting properties reduce drag-out and can result in lower product usage.
- Good filtering characteristics and high oxidation stability help increase product lifetime.
- Our chlorine- and heavy metal-free formulation, based on advanced biodegradable ester technology, improves the environmental profile and can reduce disposal costs.
- High flashpoint, low odor, light color and low mist qualities improve the work environment.
- Multi-metal machining using our superior additive technology provides opportunity for product consolidation.

Typical Characteristics

Properties	Unit	Standard	Data
Appearance	Visual	Visual	Pale yellow
Viscosity @ 40°C	mm ² /s	DIN 51562	5.5
Viscosity@ 100°F	[SUS]	ASTM D 446	46
Density @ 15°C	kg/m ³	DIN 51757 ASTM D 1298	863
	lbs/gal	Calculated	7.20
Flashpoint COC	°C	ISO 2592	> 160
	°F	ASTM D 92	> 320
Copper corrosion	3 hr at 100°C	ISO 2160 ASTM D 130	1a

	Ester	Active sulphur	Inactive sulphur	Phosphorous	Calcium	Chlorine	Zinc
Additives	+	-	-	-	-	-	-

Castrol CareCut ES 3
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