



Product Data

Castrol CareCut ES 2

High-performance neat cutting oil

Description

Castrol CareCut™ ES 2 is a chlorine- and heavy metal-free neat cutting oil based on advanced biodegradable ester technology.

Application

CareCut ES 2 is designed for high-speed, creep feed, gear grinding and drilling/general machining operations of ferrous and non-ferrous metals.

	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

- Low oil mist and foam characteristics, even at high pressures and flow rates, can lead to a reduction in oil consumption and increased production rates.
- Excellent flushing and lubrication properties extend grinding wheels 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 helps increase product lifetime.
- Our chlorine- and heavy metal-free formulation, based on advanced biodegradable ester technology helps improve the environmental profile and 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	Colourless
Viscosity @ 40°C	mm ² /s	DIN 51562	8.8
Viscosity@ 100°F	SUS	ASTM D 446	57
Density @ 15°C	kg/m ³	DIN 51757 ASTM D 1298	868
	lbs/gal	Calculated	7.24
Flashpoint COC	°C	ISO 2592	> 200
	°F	ASTM D 92	> 390
Copper corrosion	3 hrs at 100°C	ISO 2160 ASTM D 130	1b

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

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