

## Castrol CareCut ES 1

High performance neat cutting oil

### Description

Castrol CareCut™ ES 1 is a chlorine and heavy metal free neat cutting oil, based on advanced biodegradable ester technology.

### Application

CareCut ES 1 is designed for severe general machining, broaching and gear manufacturing of ferrous and non-ferrous metals.

	Cast Iron	Low-medium alloyed steel	High alloyed steel /nickel-chromium alloys	Titanium alloys	Aluminium 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, leads to a reduction in oil consumption and increased production rates
- Excellent flushing and lubrication properties extend tool life and enable high surface finish and dimensional accuracy
- Good filtering characteristics and high oxidation stability increases product lifetime
- Our chlorine, mineral oil and heavy metal free formulation, based on advanced biodegradable ester technology improves the environmental profile and reduces disposal costs
- High flashpoint, low odour, light colour and low mist qualities improves the work environment
- Multi-metal machining using our superior additive technology provides opportunity for product consolidation

## Typical Characteristics

Properties	Standard	Unit	Data
Appearance	Visual	Visual	Yellow
Viscosity @ 40°C	DIN 51562	mm <sup>2</sup> /s	28
Viscosity@ 100°F	ASTM D 446	SUS	177
Density @ 15°C	DIN 51757 ASTM D 1298	kg/m <sup>3</sup>	936
	Calculated	lbs/gal	7.81
Flashpoint COC	ISO 2592	°C	> 270
	ASTM D 92	°F	> 515
Copper corrosion	ISO 2160	3 hr at 100°C	1b
	ASTM D 130		

	ester	active sulphur	inactive sulphur	phosphorous	calcium	chlorine	zinc
Additives	+	-	+	+	-	-	-

Castrol, CareCut, and the Castrol logo are trademarks of Castrol Limited, used under licence

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet.

It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, UK  
[www.castrol.com/industrial](http://www.castrol.com/industrial)  
[www.castrol.com/industrial](http://www.castrol.com/industrial)