



Variocut G 650 HC

High performance neat cutting oil

Description

Castrol Variocut™ G 650 HC is a chlorine and heavy-metal free neat cutting oil based on the latest generation of Extreme High Viscosity Index (EHVI) hydrocracked base oils.

Application

Variocut G 650 HC is designed for high speed, creep feed and gear grinding of ferrous metals with CBN and carborundum wheels. Variocut G 650 HC is also suitable for general machining and deep drilling operations on ferrous metals.

ü ü suggested core application ü possible application, please consult Castrol representative prior to use

	Cast Iron	Low-medium alloyed steel	High alloyed steel / nickel-chromium alloys	Titanium alloys	Aluminium alloys	Yellow Metals
Honing / Superfinishing						
Grinding	ü ü	ü ü	ü ü		ü	
Drilling	ü ü	ü ü			ü	
Broaching / Gear Manufacturing						
General Machining	ü ü	ü ü	ü		ü	

Advantages

- Low oil mist and foam characteristics, even at high pressures and flow rates, lead to a reduction in oil consumption and increased production rates
- Superior additive technology leads to extremely high cutting and grinding efficiencies, increased tool life, improved surface finish and lower overall operating cost
- Low viscosity and excellent wetting characteristics reduce drag out and result in lower product usage
- Good filtering characteristics and high oxidation stability increase product lifetime
- Our chlorine and heavy-metal free formulation improves the environmental profile and reduces disposal costs
- Low odour, light colour and low mist qualities result in high operator acceptability

Typical Characteristics

Name	Test Method	Unit	Variocut G 650 HC
Appearance	Visual	-	Yellow
Density @ 15°C / 59°F	ASTM D4052 / ISO 12185	kg/m ³ - lbs/gal	827 - 6.9
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm ² /s	9.1
Flash Point - open cup method	ASTM D92 / ISO 2592	°C/°F	>160 / >320
Copper corrosion (3 hrs@100°C/212°F)	ASTM D130 / ISO 2160	Rating	1b
Brugger test	DIN 51347	N/mm ²	168

Typical Physical Characteristics

	Ester	Active Sulphur	Inactive Sulphur	Phosphorous	Calcium	Chlorine	Zinc
Additives	ü	ü	ü	ü			

Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between 5°C and 45 °C / 41°F and 113°F.

For more details, please refer the product safety data sheet.

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17 Mar 2016

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