



Product Data

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.

Variocut G 650 HC
08 Dec 2014

Castrol, the Castrol logo and related marks 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. 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 Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

<http://msdspds.castrol.com>