

## Iloquench 100

Hot quenching oil

### Description

Castrol Iloquench™ 100 is a medium viscosity oil that is particularly suitable for quenching intricate components to the required hardness. At the recommended oil bath temperature, its viscosity is low enough to prevent the retention of oil by capillary action and to reduce drag out losses. Iloquench 100 is an additive treated oil that combines high temperature thermal and oxidative stability with low volatility, thus ensuring that fuming and evaporation are kept to a minimum.

### Application

Iloquench 100 is recommended for use in hot quenching applications where distortion and stress caused by cold quenching is a problem. The product would be used for example in the automotive industry where close dimensional control of the components is essential. Iloquench 100 can be used between 120°C and 180°C. Although the product has excellent resistance to oxidative degradation, it is recommended that at these temperatures, the oil bath is protected from the air by a reducing atmosphere or inert gas.

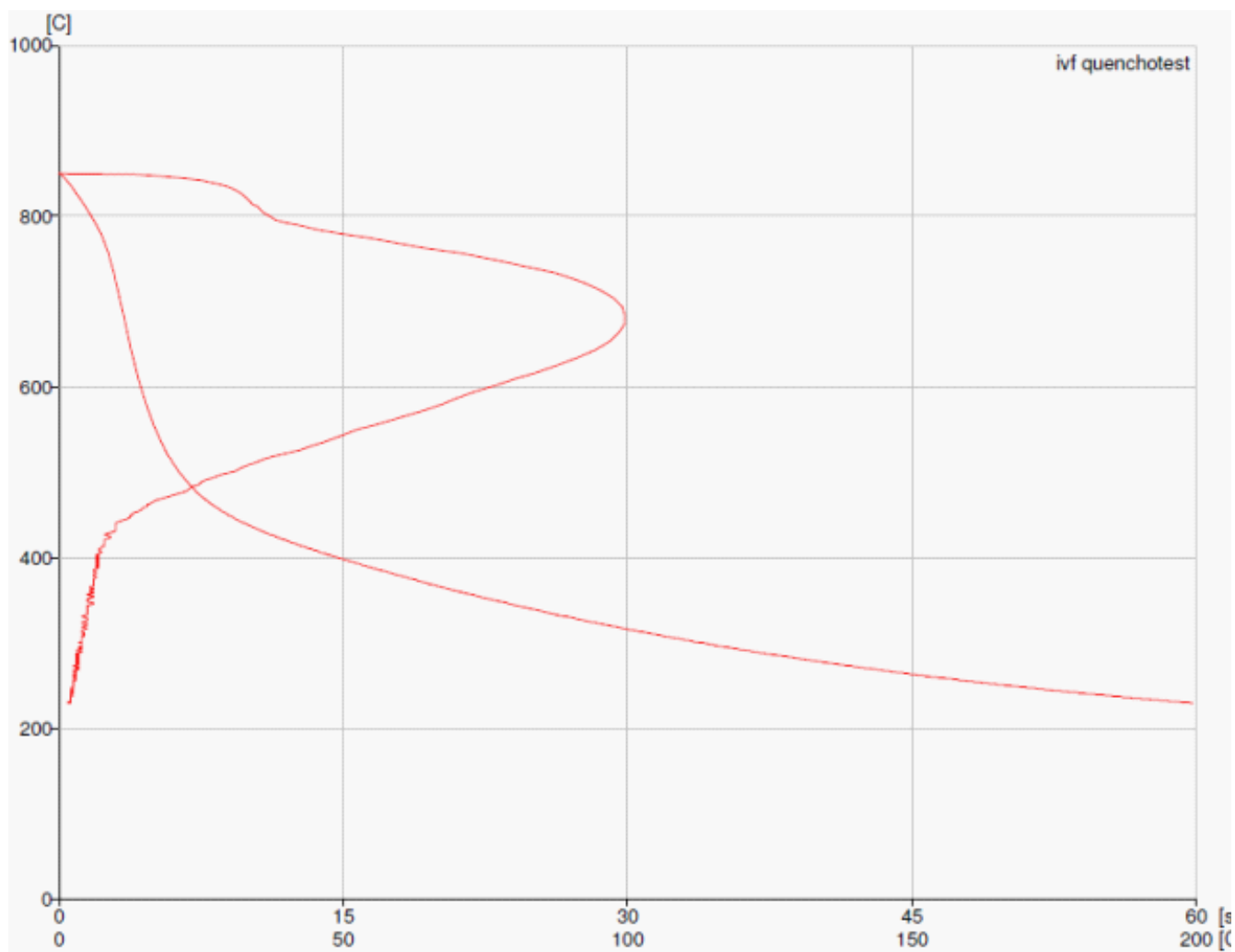
### Advantages

- Highly resistant to oxidation and thermal degradation thereby leading to a longer life in service.
- High flash point and fire points for safe operation.
- Minimum deposit formation.
- Controlled quench acceleration.
- Improved hardness with minimum cracking and distortion.
- Promotes deep hardening of parts.
- Low viscosity at high bulk oil temperatures assures low drag out losses.
- Low volatility ensures fuming and evaporation are kept to a minimum.

### Typical Characteristics

Name	Method	Units	Value
Density @ 15C, Relative	ASTM D 1298	kg/m <sup>3</sup>	886
Appearance	Visual	-	Clear, brown liquid
Kinematic Viscosity @ 40 °C	ASTM D 445	mm <sup>2</sup> /s	-
Kinematic Viscosity @ 100 °C	ASTM D 445	mm <sup>2</sup> /s	12
Flash Point, PMCC	ASTM D 93	°C	250
Pour Point	ASTM D 97	°C	-12
Acid Number, Total (Potentiometric)	ASTM D 664	mg KOH/g	0.16
Cooling Curve @ 140 °C	ISO 9950 (ivf)	-	See graph

## Typical Physical Characteristics



Iloquench 100

31 Dec 2015

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. 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 (UK) Limited, PO BOX 352, Chertsey Road, Sunbury On Thames, Middlesex, TW16 9AW

Orders/Enquiries: 0345 9645111 Technical Enquiries: 0345 082 1719

[www.castrol.com/industrial](http://www.castrol.com/industrial)