



Product Data

Iloquench 455

Cold Quenching Oil

Description

Castrol Iloquench™ 455 is a premium quality, low viscosity quenching oil. It contains an additive package that provides excellent detergency properties, thermal stability and accelerated quenching characteristics compared to straight mineral quenching oils.

Application

Iloquench 455 has been formulated primarily for use with heavy components made of deep case-hardened or low hardenability steels, low alloyed steel parts, nuts and bolts, blanked parts, bearing units.

Iloquench 455 can be used in furnaces with integrated tanks as open tanks and after salt bath process.

Conditions of Use

Temperature of use open to atmosphere:

30 - 70 °C

Avoid water entry into storage tanks or quench baths.

Advantages

- Wide boiling range helps to increase productivity through possible reduction of case-hardening or carbonitriding times while keeping required hardness for a lower carbon content
- High severity of quench - the cooling curve shows a high vapour-boiling transition temperature to avoid incomplete transformation and a low boiling-convection temperature to allow optimum hardening of steels with a low martensite start temperature.
- The high severity of quench allows lower alloy steels to be used, which aids steel cost savings while obtaining equivalent mechanical properties to those provided by using a conventional quenching oil.
- The combination of base oils and additives ensures brighter as-quenched components, free from carbonaceous deposits
- High flash point - reduces fire risk.
- Good resistant to oxidation and thermal degradation - reduces sludge and acid build-up and leads to a longer service life.

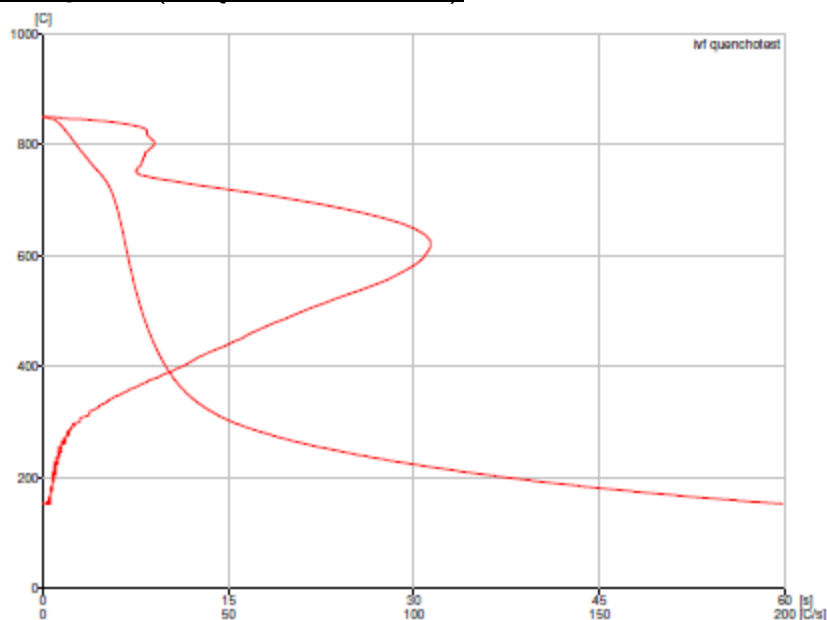
Typical Characteristics

Description	Test Method	Unit	Value
Appearance	Visual	-	Clear, brown fluid
Density @ 15 °C	ISO 12185	g/ml	0.87
Kinematic Viscosity @ 40 °C	ISO 3104	mm²/s	30
Flash Point, COC	ASTM D92	°C	> 200
Acid Number, Total (Potentiometric)	NF T 60-112	mg KOH/g	< 1
Water Content	ASTM D1744	ppm	< 500

Subject to usual manufacturing tolerances.

Additional Information

Quenching Characteristics @ 60 °C (IVF Quenchtest, ISO 9950):



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 to the product safety data sheet.

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