



Iloquench™ 395

Accelerated Cold Quenching Oil

Description

Castrol Iloquench™ 395 is a blend of premium grades of solvent refined paraffinic mineral oils with cooling rate accelerators, surface conditioning additives and a temperature stable anti-oxidant package. This combination of base oils and additives ensures brighter as-quenched components, free from carbonaceous deposits which are usually associated with low cost accelerated quench oils.

Application

- Hardening of medium carbon and low alloy steels.
- Hardening of all types of fasteners after carburising.
- Hardening of “lean” steels.

Iloquench 395 is suitable for use in all types of furnaces, open quench tanks and after salt bath process.

Advantages

Bright Quenching

The surface conditioning agent improves the surface cleanliness of the components making them easier to process through plating operations.

Material Cost Reduction

The high severity of quench of Castrol Iloquench 395 allows lower alloy steels to be used, by obtaining superior mechanical properties than those obtained by using a conventional quenching oil.

High Severity of Quench

The cooling curve shows a high vapour – boiling transition temperature (Φ_2), to ensure optimum hardening of steels with a low martensite start temperature.

Typical Characteristics

Name	Method	Units	Iloquench 395
Appearance	Visual	-	Brown fluid
Density @ 30°C	ISO 12185 / ASTM D4052	kg/m ³	840-870
Viscosity	ISO 3104 / ASTM D 445	mm ² /s	34-40
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	≥200
Fire Point	ISO 2592 / ASTM D92	°C/°F	≥220
Water Content - Dean-Stark distillation test	ISO 3733 / ASTM D95	%wt	< 0.05
Acid Number	ISO 6618 / ASTM D974	mg KOH/g	≤ 0.30
Severity of Quench @ 50 °C	-	NFT	60-178
Transition Temperature			
Vapour - Boiling Φ1	-	°C	710-740
Boiling - Convection Φ2	-	°C	320-350
Castrol Index @ 50°C	-	-	21-22
Operating Temperature:			
In open air		°C	30-80
Under atmosphere		°C	60-150

The above data is typical and does not constitute a specification.

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