

# SERVO<sup>®</sup> PRODUCT DATA SHEET

## SERVOQUENCH 11 & C 11

IndianOil

### GRADES AVAILABLE – SERVO QUENCH 11 & C11

#### DESCRIPTION

Servoquench 11 and Servoquench C11 oils are high quality oils developed for general purpose metal quenching operations.

These oils are formulated from specially selected high viscosity index base stocks having good oxidation stability, good fluidity and low volatility. Servoquench 11 is a straight mineral oil having normal quenching characteristics. Servoquench C11 is incorporated with a polar additive, which imparts accelerated quenching property to the oil so as to meet certain specific end use requirements.

#### PERFORMANCE BENEFITS

Servoquench C and C 11

- Have good quenching characteristics
- Have long service life due to excellent oxidation stability
- Impart uniform hardness without distortion
- Have a wide application range

#### APPLICATION

Servoquench oils are used for all normal quenching operations on a wide variety of steel to impart the desired hardness to components without distortion. The special compounding agent incorporated in Servoquench C11 improves the wetting ability of the oil, so that it provides faster initial cooling for optimum hardness, where as the base oil ensures slow cooling in the final stage for stress relief and distortion free results.

Servoquench 11 is normally used for hardening nuts, bolts, ball bearings and certain types of brake drums as well as many other components manufactured by automobile and light engineering industries. Servoquench C11 is suitable for hardening of a variety of ball bearings, high speed steel tools, and other components in major industries

#### PERFORMANCE STANDARDS

Servoquench 11 meets IS : 2664-1980

(Reaffirmed 1993) for straight mineral type medium grade quenching oil

Servoquench C11 meets IS : 2664-1980

(Reaffirmed 1993) for additive type quenching oil

### CHARACTERISTICS

GRADE	11	C11
Kinematic Viscosity, cSt @ 40°C	27-33	27-33
Viscosity Index, Min	95	95
Flash Point (C)OC), °C Min.	200	200
Pour Point, °C Max.	0	0
Compounding	---	Yes

### HEALTH & SAFETY

These oils are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.

For further information please contact our nearest office OR:

Technical Services Dept., Indian Oil Corporation Ltd., G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai – 400 051

E-Mail: [tservices@indianoil.co.in](mailto:tservices@indianoil.co.in) OR [tech\\_services@indianoil.co.in](mailto:tech_services@indianoil.co.in)

## SERVOQUENCH 107 & 707

IndianOil

### GRADES AVAILABLE – SERVO QUENCH 107 & 707

#### DESCRIPTION

Servoquench 107 and Servoquench 707 are low viscosity quenching oils of exceptionally high quality. These oils are suitable for heat treatment operations on metal components with demand-accelerated rate of quenching.

These oils are blended from selected low sulphur base stocks having excellent oxidation stability, good thermal stability, high fluidity and low volatility.

#### PERFORMANCE BENEFITS

- Provide accelerated rate of quenching
- Ensure cleanliness of quenching oil systems
- Have low drag-out on components thus reduce oil consumption
- Have exceptionally long, oil service life due to excellent oxidation stability, good thermal stability as well as low volatility
- Retain quenching power over extended periods due to minimum oil thickening and sludge forming tendency
- Assist in obtaining uniform hardness of metal components

#### APPLICATION

Servoquench 107 is recommended for general purpose fast quenching applications. It is recommended for hardening of many components, in automobile and light engineering industries. This product is particularly used for hardening of bolts, set screws, crankshafts, axles camshafts, steering arms and brake drums.

Servoquench 707 is recommended for accelerated quenching of a variety of steel components in major industries. It is particularly used for quenching of high-speed steel tools, bolts, nuts and ball bearings.

Servoquench 707 is also used for quenching of many components after carbonitriding.

#### PERFORMANCE STANDARDS

Servoquench 107 meets:

- IS : 2664-1980 (Reaffirmed 1993) for straight mineral type medium grade quenching oil, with minor deviations.

Servoquench 707 meets:

- IS: 2664-1980 (Reaffirmed 1993) for additive type quenching oil, with minor deviations

### CHARACTERISTICS

GRADE	107	707
Kinematic Viscosity, cSt @ 40°C	20 – 24	20 – 24
Viscosity Index, Min.	95	95
Flash Point (COC), °C, Min.	175	175
Pour Point, °C, Max.	0	0
TAN, mg KOH/gm, Max	0.05	0.1

### HEALTH & SAFETY

These oils are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.

For further information please contact our nearest office OR:

Technical Services Dept., Indian Oil Corporation Ltd., G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai – 400 051

E-Mail: [tservices@indianoil.co.in](mailto:tservices@indianoil.co.in) OR [tech\\_services@indianoil.co.in](mailto:tech_services@indianoil.co.in)