

QUENCHING OIL

Description

Quenching oils are specially formulated heat treatment fluids used for the controlled cooling of steel and alloy components after heating. The choice of oil depends on the grade, composition, and required cooling speed, which directly impacts the hardness, mechanical properties, and durability of treated components. These are mineral-based quenching oils blended with oxidation inhibitors and cooling improvers. They are designed to provide uniform cooling rates and controlled hardness, minimizing distortion and cracking in components.

Composition

Refined paraffinic/mineral base oils. Antioxidant and anti-wear additives. Cooling accelerators in Special grades.

Application

- Used in general-purpose heat treatment of carbon steel, alloy steel, and cast components.
- Suitable for gears, bearings, tools, shafts, springs, and fasteners.
- Grades are chosen based on the desired cooling speed and component thickness.

TECHNICAL DATA

TEST	TYPICAL RESULTS
Viscosity , cst@40°C	31.0
Viscosity , cst@100°C	4.5
Viscosity Index, min	148
Flash Point °C, min	232
Pour Point °C, max	-6
Density,@15°C	0.876