

HARDENING OIL

# NISOTEC KALOL 46E

**NISOTEC KALOL 46E** is a top-quality hardening oil. Specially formulated to ensure good tempering and elimination of the appearance of cracks and deformations during metal processing by tempering. It provides excellent long-term performance in quenching operations to adjust the hardness and strength of the metal. Excellent economy with a long shelf life due to low volatility and good aging resistance. Enables efficient washing of hardened parts with water.

## **Applications:**

- Hardening process in open and closed systems where subsequent washing of parts with water is required
- Recommended for hardening all types of steel: steel for cementation, steel for ball bearings, Mn-Si steel for springs, unalloyed steel.

Characteristics	Advantages	
High flash point	Reduced fire risk	
Low volatility	Reduced evaporation losses and improved operating conditions	
Good thermal and	Longer oil life at elevated system temperatures and less	
oxidation stability	downtime due to maintenance needs	

## Specification: • ISO 6743-14 (L-UH)

## **Typical characteristics**

Characteristics	Method	NISOTEC KALOL 46E
Kinematic viscosity at 40°C, mm <sup>2</sup> /s	ISO 3104	46
Viscosity index	ISO 2909	100
Flash Point (COC), °C	EN ISO 2592	220
Pour Point, °C	ISO 3016	-12
Density at 15°C, kg/m <sup>3</sup>	EN ISO 3675	878

#### Health, Safety and Environment

Information on the safe handling, storage and disposal of the product, as well as information on precautionary measures and potential hazards, effects on human health and the environment can be found in the Product Safety Data Sheet (SDS). Store the product in its original packaging protected from atmospheric influences. Shelf life 5 years from the date of manufacture.

## Available packaging



✓ ISO 9001

 $\checkmark$ 

ISO 14001 🗸 ISO

ISO 45001

ISO 50001

✓ CERTIFIED

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