# **MAR-TEMP H 340**

(Formerly MAR-TEMP 340)
HIGH PERFORMANCE HOT QUENCHING OIL – (ISO 6743-14) UHF

#### **DESCRIPTION**

MAR-TEMP H 340 is a high performance accelerated hot quenching oil suitable for use at temperatures of up to 180°C. It is based upon solvent-refined mineral oils and contains a specially formulated additive package which provides accelerated quenching characteristics and excellent oxidation resistance and thermal stability. MAR-TEMP H 340 has a high flash point and will provide long life under arduous operating conditions.

#### **APPLICATIONS**

MAR-TEMP H 340 is designed for hot oil quenching applications where minimum distortion is required and a very high cooling rate is necessary to achieve the optimum hardness and physical properties. It finds particular application in sealed quench furnaces at temperatures up to 150°C, under a protective atmosphere, for the control of distortion on critical high precision components such as bearing rings or automotive transmission parts in through hardened, carburised and carbo-nitrided steels. It can also be used in open tanks at temperatures in excess of 100°C for the quenching of gears and shafts. The additives incorporated into MAR-TEMP H 340 reduce the duration of the vapour phase and provide a high maximum rate of cooling. This enables the development of maximum hardness and physical properties, and is particularly important on critical carburised or carbonitrided gear components where maximum hardness and case depth is a tooth root requirement

### **TYPICAL PHYSICAL PROPERTIES**

Appearance	Clear brown	visual
Specific Gravity @ 15.5°C	0.894	
Kinematic Viscosity @ 40°C in mm²/s	110	ASTM D445
Kinematic Viscosity @ 100°C in mm²/s	12	ASTM D445
Flash Point COC in°C	255	ASTM D92
Maximum Cooling rate in °C/s @ 80°C	85	ISO 9950

#### **BENEFITS**

- Economic Lifetime improved provided by excellent oxidation resistance and thermal stability
- Economic Consistent performance under the most arduous of operating conditions
- Economic Uniform quenching characteristics maintained over a range of operating temperatures
- Economic Control of sludge formation
- Economic Drag out limited by viscosity adapted for hot application
- o Operator friendly Base oil highly refined
- Safety High flash point
- Safety High performing chemistry which keep your added value safe

#### **RECOMMENDATION FOR USE**

Use as supplied - neat quenching oil application

#### **RELATED PRODUCTS**

Product is compatible with the full range of Houghton's portfolio, especially with the Houghto-Clean and Ensis corrosion protection range. For more information, please contact your local Houghton representative.

#### **STORAGE**

Please refer to section 7 of Safety Data Sheets for handling and storage information, including product shelf life. Product should be stored under cover in clean, dry conditions and protected from frost. Recommended storage temperature is usually between 5°C and 40°C unless otherwise specified. Use stock in delivery rotation.

## **HEALTH AND SAFETY**

Safety data sheets are available in accordance with Regulation (EC) No 1907/2006 Annex II where a substance or preparation meets the criteria in accordance with Directives 67/548/EEC or 1999/45/EC.

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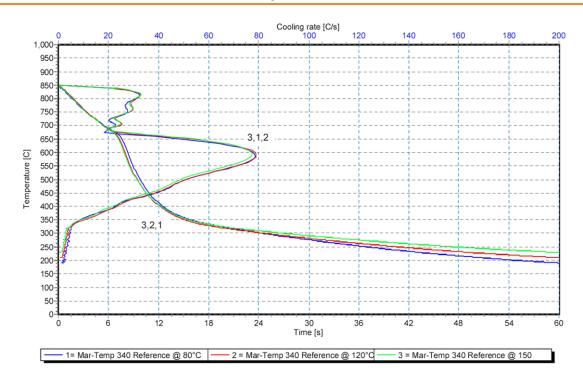
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### **COOLING CURVE - EFFECT OF TEMPERATURE ON QUENCHING CHARACTERISTICS**



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