# **MAR-TEMP VH 300**

(Formerly MAR-TEMP 300)
HIGH PERFORMANCE VERY HOT QUENCHING OIL – (ISO 6743-14) UHG

## **DESCRIPTION**

MAR-TEMP VH 300 is a high performance very hot quenching oil with normal speed suitable for use at temperatures of up to 220°C. It is based upon solvent-refined mineral oils providing excellent resistance to oxidation.

MAR-TEMP VH 300 has a high flash point and thermal stability and will provide long life under arduous operating conditions.

MAR-TEMP VH 300 is suitable for tempering and heat transfer applications.

MAR-TEMP VH 300 has Rolls Royce approval CSS 184.

# **APPLICATIONS**

MAR-TEMP VH 300 is designed for quenching applications involving extremely distortion-prone components, where a combination of slow cooling to the hot oil quenching temperature (generally 150 - 200°), followed by isothermal holding and subsequent air cooling is necessary to control distortion. The high flash point and excellent oxidation resistance also make MAR-TEMP VH 300 suitable for use at temperatures of up to 220°C for tempering and heat transfer applications.

The controlled slow cooling provided by MAR-TEMP VH 300 over a wide temperature range in the convection stage of the quenching process, makes it ideally suitable for the control of distortion on complex components in higher hardenability steels. There is an increase in cooling rate with oil temperature up to a maximum at 150°C

# **TYPICAL PHYSICAL PROPERTIES**

Appearance	Clear brown	visual
Specific Gravity @ 15.5°C	0.914	
Kinematic Viscosity @ 40°C in mm²/s	460	ASTM D445
Kinematic Viscosity @ 100°C in mm²/s	32	ASTM D445
Flash Point COC in°C	270 mini	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
- o Operator friendly Base oil highly refined
- Safety High flash point

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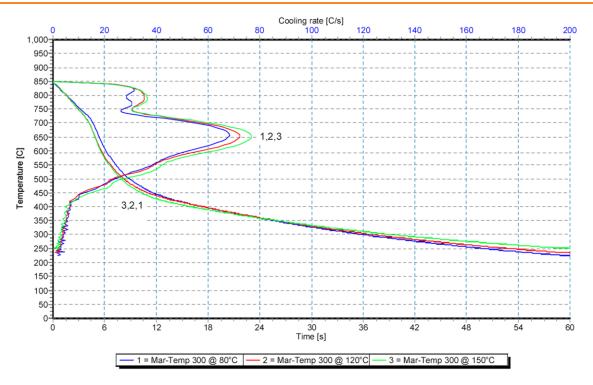
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# **COOLING CURVE - EFFECT OF TEMPERATURE ON QUENCHING CHARACTERISTICS**



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