

MAR-TEMP® 355

Martempering oil for relatively low temperatures and a medium quenching effect

DESCRIPTION

MAR-TEMP 355 is a martempering oil with low viscosity and a medium quenching speed throughout its use range. It is a selected solvent-refined paraffinic mineral oil and is used for tempering and martempering at temperatures up to 204°C (400°F). **MAR-TEMP 355** is the fastest of Houghton's Mar-Temp oils and has an extended life due to the additions of anti-oxidants.

MAR-TEMP 355 is used for martempering of distortion-prone parts of case hardened or through hardened steels and for the tempering of ferrous and non-ferrous metals, or certain non-metallics.

MAR-TEMP 355 can be used in open, closed or integral quench tanks.

TYPICAL VALUES

Product Appearance	Brown Oil
Flash Point (COC)	> 226°C
Fire Point (COC)	> 258°C
Specific Gravity @15°C	0.885 kg/L
Viscosity @40°C	65 cSt
Viscosity @100°C	8 cSt
Ash Content %	1.1 %w/w
GM Quench Speed @26.7°C	19.7—20.2 seconds
GM Quench Speed @37.8°C	16.9—16.4 seconds
GM Quench Speed @65.6°C	18.1—18.0 seconds
GM Quench Speed @93.3°C	14.2—13.4 seconds
GM Quench Speed @121.1°C	14.1—14.4 seconds
GM Quench Speed @148.9°C	13.6—14.2 seconds
GM Quench Speed @176.7°C	16.9—16.8 seconds
GM Quench Speed @204.4°C	20.9—18.9 seconds

FEATURES

- Resistant to normal contaminants
- Controlled, medium quench speed
- Better control of distortion
- Quenches work from air, atmosphere and salt
- Compatible with other oils
- Minimal dragout meaning less smoke and makeup required
- Maximum metallurgical and physical properties.
- A medium rate of cooling in the initial stage of quenching
- Elimination of waste due to minimal quench oil degradation
- Low quench oil cost per kg of work processed.

HEALTH AND SAFETY

Refer to MSDS for proper handling and disposal. Please note that the MSDS includes handling, health and disposal information which should be passed on to your employees, and to anyone else who comes in contact with our product. Additional advice can also be obtained from your local Houghton representative.

NOTE: Read and understand all precautions on container labels before using this product.

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HOW TO USE

In order to attain a long service life from **MAR-TEMP 355**, the following advice should be observed.

Minimum Temperature	30°C
Maximum Temperature	
• On Open Quenching	190°C
• Under Controlled Atmosphere	205°C
• Tempering In Open Tank	205°C

Out of regard to the high use temperatures, **MAR-TEMP 355** should have as little contact with the air as possible. It is recommended to minimise the air-oil interface. The oil should be gently agitated to maintain uniform temperature. Stronger agitation should only be applied during actual quenching of work. The heating elements used for warming the **MAR-TEMP 355** should have 6.5 to a maximum of 10.0 watts/square inch, otherwise the oil would be locally overheated and could form polymers precipitating on the heater as insulation oil-coke which would cause the heating element to fail prematurely.

Heating elements and coolers should not consist of copper or copper alloys. These metals act as catalysts, accelerating the oxidation and polymerisation of mineral oils. Use steel, stainless steel, nickel-plated or tin-plated materials instead. Existing copper coolers should be tin-plated.

SHELF LIFE & AVAILABILITY

Under normal conditions the recommended shelf life for **MAR-TEMP 355** is a minimum of Twelve (12) months, unless otherwise specified.

MAR-TEMP 355 is available in Pail, Drum or Tote. Other sizes may be available upon request, please contact your Houghton sales representative.

RELATED PRODUCTS

- HOUGHTO-QUENCH®: Cold and Warm Quenching Oils
- DASCO-QUENCH®: Cold, Warm and Hot Quenching Oils
- VOLUTA™: Cold, Warm and Hot Quenching Oils
- MAR-TEMP®: Hot Quenching Oils
- AQUA-QUENCH®: Polymer based Quenching Fluids
- DASCOLENE™: Straight OEM approved cutting oils
- HOCUT®: Water miscible metalworking fluids
- HOUGHTO-GRIND®: Straight and water miscible grinding fluids
- HOUGHTO-DRAW®: Straight and water miscible drawing stamping and forming fluids.
- CINDOL™: Straight and water miscible drawing and forming fluids especially for Aluminium parts.
- CERFA-KLEEN®: Water miscible cleaning fluids
- VIBRA-KLEEN®: Water miscible vibrating cleaning fluids
- CALLINA™: Water miscible cleaning fluids
- ENSIS™: Straight and water miscible rust preventive fluids.
- RUST VETO®: Straight and water miscible rust preventive fluids.
- COSMOLINE®: MIL-SPEC Straight and water miscible rust preventive fluids.
- HOUGHTO-SAFE®: Water-Glycol and Phosphate Ester fire resistant hydraulic fluids
- COSMOLUBRIC®: Water-Glycol fire resistant hydraulic fluids
- HYDROLUBRIC®: Synthetic water additive fire resistant hydraulic fluids

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