

Marquench Oil M

DuBois

Marquenching Oil

DESCRIPTION:

MARQUENCH OIL M is a clear, dark amber colored product designed to provide maximum cooling rates for austenitized steels. It is an accelerated guench oil designed for application temperatures between 250 to 350°F (121 -177°C) and can be used as a guench media for austenitized parts at temperatures as high as 1750°F (954°C). Its formulation guarantees good stability due to its accelerator package which will not stratify out at any temperature, nor can it be filtered out. The use of this hot oil is commonly encountered in carburizing and carbonitriding furnaces or in operations where parts are prone to distortion and cracking. The accelerated cooling rate during the first stages of quenching enables the user to produce uniformly well hardened parts, while the higher operating temperature of the quenchant slows the cooling rate during martensitic transformation.

You can use **MARQUENCH OIL M** with confidence. Your parts will achieve maximum oil quenched hardness with minimum distortion or cracking. Lastly, **MARQUENCH OIL M** will produce exceptionally clean, bright work when used within its recommended temperature range.

TECHNICAL DATA:

Appearance:Clear, dark amber oil.Viscosity at 40 °C:64.0 - 88.0 cSt (typical)Flash Point: $\geq 224 \text{ °C}$ (435 °F)Antioxidation Agent:Present

BATH PARAMETERS:

Temperature:250 - 350 °F (121 - 177°C)Velocity:> 100 FPM (0.5 MPS)Time:As required for appropriate
metallurgical transformation

EQUIPMENT:

All equipment for **MARQUENCH OIL M** baths may be constructed of mild steel.

Electrical immersion heaters used to raise the temperature of the oil should not exceed 10.0 watts per square inch, in a well agitated environment.

CONTROL:

The quenching speed of **MARQUENCH OIL M** can be obtained through testing by DuBois Chemicals. Test method ASTM D6200 - Standard Test Method for Determination of Cooling Characteristics of Quench Oils by Cooling Curve Analysis is performed on as-used **MARQUENCH OIL M** samples submitted by customers. If the quenching speed becomes slower resulting in lower hardness levels, a 5% addition of **MARQUENCH OIL M ACCELERATOR** by volume of the quench system will restore the speed, increase hardness levels, and reinforce the anti-oxidizing agent in the as-used oil.

MARQUENCH OIL M may need centrifuging or filtering depending on sediment that is dragged in. Sediment level should be maintained at $\leq 0.5\%$ by volume.

All efforts should be made to avoid water contamination of **MARQUENCH OIL M.** Water will cause very erratic quench characteristics as well as posing a serious fire hazard.

SAFE HANDLING & STORAGE CONDITIONS:

Before handling, the Safety Data Sheet (SDS) should be read and understood by all personnel in contact with this product. General indoor storage at room temperature is recommended.

DISPOSAL:

Any disposal of this product should be in compliance with all federal, state, and local regulations. Please refer to the Safety Data Sheet (SDS) for instructions regarding proper disposal of this product.

This information is presented in good faith, but no warranty, expressed or implied is given. The final determination of the suitability of the products for the application contemplated by the user is the sole responsibility of the buyer. This is an uncontrolled copy and changes can be made to this document without notice.



MARQUENCH OIL M, Continued

Page 2

PRECAUTIONS:

KEEP OUT OF THE REACH OF CHILDREN.

Please refer to the label and Safety Data Sheet (SDS) for all warnings, recommendations for safety equipment, and other regulatory information. Copies of the SDS can be ordered by calling 800-438-2647.

This information is presented in good faith, but no warranty, expressed or implied is given. The final determination of the suitability of the products for the application contemplated by the user is the sole responsibility of the buyer. This is an uncontrolled copy and changes can be made to this document without notice.

DuBois Corporate Office | 3630 E Kemper Road Sharonville, OH 45241 | 800-438-2647 duboischemicals.com



©2024 DuBois Chemical