Product Data Sheet

Mobiltherm R
Heat Treatment Quenching Oils

Product Description

Mobiltherm R is a solvent refined paraffinic mineral oils having high levels of chemical stability at high temperatures and so keeping formation of carbonaceous deposits to a minimum.

Benefits

Mobiltherm R offers the following benefits:

- High chemical stability gives long oil life
- Minimum drag out reduces oil wastage
- High quality base stocks resist formation of carbonaceous deposits and give consistent quench rates
- Long oil life and reduced despots give minimum plant maintenance
- On site blending of the two products can achieve variable quenching rates

Applications

Mobiltherm R is recommended as a conventional quenching media at faster rates.

Properties

The viscosity, boiling range, chemical stability and carbon residue all play important roles in the formulation of heat treatment media since they influence the speed and rate of quench which in turn influences the material structure and final hardness. These properties are carefully controlled in Mobiltherm R to provide top level performance in all applications.

Low viscosity oils provide excellent convection in the bath and reduce drag out.

Mobiltherm R heat treatment oil has excellent chemical stability and reduce the incidence of formation of both soluble and insoluble oxidation products, which can increase the viscosity of the oil and reduce heat transfer rates by deposit formation on the pieces being quenched.

It also has minimum carbon residue which, if excessive, can adversely affect convection currents in the quench bath and also form heat transference barriers on the components.
Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly. Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000. Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Product Characteristics

<table>
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<tr>
<th>Mobiltherm R</th>
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<tr>
<td>Viscosity, cSt at 40°C</td>
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<td>Viscosity, cSt at 100°C</td>
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<td>Flash Point, ºC min. COC</td>
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Due to continual product research and development, the information contained herein is subject to change without notice.

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