Globaltherm® MXT is a high temperature mineral thermal fluid with a highly resilient blend of additives to ensure long-lasting and trouble-free service.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name
Globaltherm® MXT
Heat transfer fluid

Company Information
Globaltherm, Cold Meece Estate, Cold Meece, Stone, Stafford, ST15 0SP, UK

Emergency telephone
+44 (0) 1785 760555

Web
www.globaltherm.org

2. PRODUCT DESCRIPTION

Globaltherm® MXT heat transfer fluid is a mineral based liquid phase heat transfer oil used for operating at bulk temperatures between -7°C and 320°C in both open and closed circulation. Globaltherm® MXT Heat transfer fluid contains a highly resilient blend of additives to ensure long-lasting and trouble-free service when managed correctly.

Globaltherm® MXT Heat transfer fluid delivers superior resistance to sludging and thermal cracking found in many industrial processing environments, including; chemical, pharmaceutical, plastics, paper, wood and textiles. Globaltherm® MXT Heat transfer fluid is non-corrosive and non-toxic.

Used fluid may be disposed of through a number of environmentally acceptable methods, such as used oil recycling or heavy fuels burning. Talk to us about our all-inclusive used oil reprocessing services.

NOTE: When draining hot fluid after flushing, normal safety precautions should be taken to prevent burns and the risk of fire.
3. SERVICE APPLICATIONS

Globaltherm® MXT Heat transfer fluid is a heat transfer agent suitable for a range of indirect open and closed liquid phase industrial heat transfer systems including; chemical, pharmaceutical, plastics, paper, wood and textiles.

Globaltherm® MXT Heat transfer fluid is recommended for use in a temperature range up to a maximum bulk temperature of 608°F (320°C).

4. SERVICE CONSIDERATIONS

As with any heat transfer oil, certain precautions should be taken to ensure satisfactory performance of Globaltherm® MXT Heat transfer fluid in service:

- Before full temperature is imposed, all air and water should be completely vented;
- Hot oil is rapidly oxidised by air, causing thickening and deposit formation. At places where the oil is in contact with the atmosphere (e.g., the expansion vessel) the oil should not exceed 60°C for prolonged times or the oil needs to be blanketed with inert gas. Copper and its alloys promote rapid oil degradation in the presence of air and need to be avoided at these places; and,
- Hot oil circulating pumps must be checked frequently to prevent air from entering.

An analytical routine check of the heat transfer medium, while it is hot and circulating, should be part of the routine maintenance plan. This check should be carried out at least once a year, preferably three to four times a year. Testing can be carried out by Global Heat Transfer - via the Thermocare® lifecycle management programme - to all users of Globaltherm® Heat transfer fluids. The thermal fluid parameters which are measured will allow our experts an accurate assessment of the condition of the fluid. This way, Thermocare® testing and analysis programmes ensure prolonged and trouble-free operation of the fluid. Changes to the condition of the fluid are quickly detected and managed with Thermocare® and can be avoided in time before more extensive damage (to both system and fluid) and further costs are incurred.

Phone: +44 (0) 1785 760555; fax: +44 (0) 1785 760444 to ask about Thermocare® preventative maintenance programmes and heat transfer fluid testing and analysis.

5. COMPATIBILITY

Globaltherm® MXT Heat transfer fluid can be used as a top-up to used fluids and may help to increase fluid life. Laboratory testing is recommended before topping-up the system with this product. Global Heat Transfer can assist with lab testing. Please contact +44 (0) 1785 760555 for more information.

6. HEALTH AND SAFETY

Globaltherm® MXT Heat transfer fluid presents no hazard to health or safety under good standards of industrial and personal hygiene. Full details of health and medical procedures are contained in the Material Safety Data Sheet. Please contact our technical team on +44 (0) 1785 760555.
7. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Code (ASTM/ISO)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>N/A</td>
<td>N/A</td>
<td>Clear, yellow oil</td>
</tr>
<tr>
<td>Operating Range</td>
<td>°C (°F)</td>
<td>N/A</td>
<td>-7°C - 320°C (19°F - 620°F)</td>
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<tr>
<td>Density @ 15°C</td>
<td>g/cm³</td>
<td>ASTM D 7042</td>
<td>0.879</td>
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<tr>
<td>Kin. Viscosity 40°C</td>
<td>mm²/s⁻¹ (cSt)</td>
<td>ASTM D 7042</td>
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<tr>
<td>Kin. Viscosity 100°C</td>
<td>mm²/s⁻¹ (cSt)</td>
<td>ASTM D 7042</td>
<td>5.6</td>
</tr>
<tr>
<td>Open Flash Point</td>
<td>°C</td>
<td>ASTM D 92</td>
<td>230</td>
</tr>
<tr>
<td>Fire Point</td>
<td>°C</td>
<td>ASTM D 92</td>
<td>244</td>
</tr>
<tr>
<td>Coefficient of thermal expansion</td>
<td>°C</td>
<td>NTR</td>
<td>0.1011%</td>
</tr>
<tr>
<td>Auto ignition Point</td>
<td>°C</td>
<td>ASTM E659-78</td>
<td>393</td>
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<tr>
<td>Pour Point</td>
<td>°C</td>
<td>ASTM D 97</td>
<td>-9</td>
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<tr>
<td>Maximum Bulk Temperature</td>
<td>°C</td>
<td>NTR</td>
<td>320</td>
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<tr>
<td>Maximum Film Temperature</td>
<td>°C</td>
<td>NTR</td>
<td>360</td>
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<tr>
<td>Boiling Point</td>
<td>°C</td>
<td>NTR</td>
<td>&gt;343</td>
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<tr>
<td>Average Molecular Weight</td>
<td>NTR</td>
<td>NTR</td>
<td>399</td>
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<tr>
<td>Moisture Content</td>
<td>PPM</td>
<td>ASTM D 6304</td>
<td>Not Determined</td>
</tr>
</tbody>
</table>

Note: The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This edition supersedes all previous editions and information contained within them. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product. Abbreviations: OC, open cup test; COC, Cleveland open cup test; and, NTR, no test reported.

8. OTHER INFORMATION

PI Creation Date July 2017 (#1) Revision date NA
THERMOCARE® IS THE AWARD WINNING
24/7 REAL-TIME CONDITION MONITORING AND
MANAGEMENT SYSTEM FOR HEAT TRANSFER FLUID

thermocare®

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your environmental impact.

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a straightforward fixed cost.

And, what’s more we have over 25 years’ experience in thermal fluid
management so you couldn’t be in better hands.

GET IN TOUCH
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