Key Benefits

- Qualified to ISO13628-6/API 17F, approved for use by all major equipment manufacturers
- Specified for high-pressure & high-temperature wells with downhole temperatures up to 180°C / 356°F
- Excellent corrosion protection (liquid & vapor phase) and lubrication properties
- Outstanding stability with high levels of seawater ingress
- Resistant to microbial infection
- Fluorescent dye for leak detection
- Fully compatible with Oceanic HW500 Series, HW500P Series, HW500E Series, HW443 Series & XT900
- Manufactured to NAS 1638/AS 4059 Class 6/6b-f or better cleanliness
- Meets stringent global environmental acceptability regulations
- Free Fluid Monitoring programme ensures long service life

Description

High-performance, high-temperature water-based hydraulic fluids with an operational temperature range from -25°C to 180°C (-13°F to 356°F). Oceanic HW740 R is used in modern open and closed loop Subsea Production control systems.

Approvals

Oceanic HW740 R is approved for use by all major equipment, umbilical, DCV & DHSV manufactures. Oceanic HW 740 R is for high-pressure, high-temperature applications tested to and meeting the acceptance criteria within ISO13628-6.

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Oceanic HW 740 R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Red/Pink Fluorescent Fluid</td>
</tr>
<tr>
<td>pH</td>
<td>9.0</td>
</tr>
<tr>
<td>Specific Gravity @15.6°C</td>
<td>1.07</td>
</tr>
<tr>
<td>Kinematic Viscosity (cSt)</td>
<td></td>
</tr>
<tr>
<td>-20°C (-4°F)</td>
<td>25</td>
</tr>
<tr>
<td>0°C (32°F)</td>
<td>9.2</td>
</tr>
<tr>
<td>40°C (104°F)</td>
<td>2.5</td>
</tr>
<tr>
<td>Pour Point</td>
<td>&lt;31°C (24°F)</td>
</tr>
</tbody>
</table>

Complies with API 6A class P,R,S,T,U & V

For further recommendations, technical information, Health & Safety data sheets, OEM or environmental approvals, email wigansales@macdermid.com
Environmental Information

MacDermid maintains worldwide environmental approvals and can offer Oceanic Subsea Production control fluids suitable for use in every exploration and production region around the world. The current environmental status of Oceanic HW740 R in your area can be obtained from our environmental specialists.

Storage

Oceanic HW740 R should be stored in dry conditions, ideally out of direct sunlight. Normal storage temperature range is 5 to 40°C.

Material Compatibility

Oceanic HW740 R contain performance additives which ensure high levels of compatibility with materials typically used in subsea production control equipment. Extensive material compatibility tests have been performed with Oceanic HW740 R.

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous metals (cast iron, carbon steel)</td>
<td>Compatible with alloys typically used in subsea production control equipment. Avoid Zn, Cd, Pb and Mg metals. Aluminum should be hard anodized.</td>
</tr>
<tr>
<td>Non-ferrous metals (copper, brass, bronze and other metals and alloys*)</td>
<td>Compatible with standard NBR, HNBR, FFKM, VMQ/FMVQ, CR, TFE/PTFE, PEEK. Some FKM &amp; AU/EU/PU have proven to be incompatible</td>
</tr>
<tr>
<td>Coatings and ceramic materials</td>
<td>Avoid porous coatings. Compatible with most ceramic parts. Check ceramic coatings</td>
</tr>
<tr>
<td>Packaging &amp; sealing materials</td>
<td>Compatible with Nylon 11, PE and Polyether ester copolymers</td>
</tr>
<tr>
<td>Umbilical hose liner thermoplastics</td>
<td>Compatible with standard NBR, HNBR, FFKM, VMQ/FMVQ, CR, TFE/PTFE, PEEK. Some FKM &amp; AU/EU/PU have proven to be incompatible</td>
</tr>
<tr>
<td>Absorbent gasket materials</td>
<td>Avoid cork, leather, cotton impregnated materials</td>
</tr>
<tr>
<td>Paints</td>
<td>Avoid painting internal surfaces. Cured epoxy, phenolic and nylon based paints are satisfactory. Avoid less resistant paints as they soften. Wash spillages immediately with water</td>
</tr>
<tr>
<td>Filter elements</td>
<td>Polypropylene and glass fiber filter elements recommended over paper filters</td>
</tr>
</tbody>
</table>

* As material compatibility varies from compound to compound and supplier to supplier, consult supplier for recommendations or request specific compatibility tests.

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A Subsidiary of MacDermid Group

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