



Key Benefits

- **Approved for use by major equipment manufacturers**
- **Maximum operating temperatures up to 100°C/212°F**
- **Excellent ferrous and non-ferrous corrosion protection properties**
- **Excellent extreme pressure and anti-wear lubrication properties**
- **Resistant to microbial infection**
- **Qualified to ISO 13628-6/API 17F**
- **Fully compatible with Oceanic HW500 Series, HW500E Series, HW443 Series, HW700 Series & XT900**
- **Manufactured to NAS 1638/AS 4059 Class 6/6b-f or better cleanliness**
- **Free Fluid Monitoring programme ensures long service life**

Description

High-performance water-based hydraulic fluids designed for use in open and closed loop Subsea Production Control systems. Oceanic HW500P fluids are Oceanic HW500 Series fluids with a trace of fluorescent dye to facilitate leak detection. They are industry standard fluids and are specified for use by equipment manufacturers.

The fluids within the Oceanic HW500P range are compatible with each other and offer the same excellent technical performance. Fluids differ only in glycol content, which ensures optimal response times in all geographical regions.

Approvals

Oceanic HW500P Series is preferred by major equipment manufacturers.



Typical Physical Properties

| | Oceanic HW510P | Oceanic HW525P | Oceanic HW540P |
|---------------------------|------------------------------|-------------------------------------|--|
| Appearance | Fluorescent Blue Green Fluid | Fluorescent Blue Green Fluid | Fluorescent Blue Green Fluid |
| pH | 9.4 | 9.4 | 9.4 |
| Specific Gravity @15.6°C | 1.02 | 1.039 | 1.06 |
| Kinematic Viscosity (cSt) | | | |
| -20°C (-4°F) | Solid | Solid | 18 |
| 0°C (32°F) | 3.1 | 4.8 | 7.6 |
| 40°C (104°F) | 1.0 | 1.5 | 2.1 |
| Pour Point | -4°C (25°F) | <-15°C (<5°F) | <-25°C (<-13°F) |
| Freeze Point | | -21°C (-6°F) | 48°C (-54°F) |
| | | Complies with API 6-A class R,S & T | Complies with API 6A class P,R,S and T |

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

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OCEANIC HW500P SERIES



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 HW500P fluids in your area can be obtained from our environmental specialists.

Storage

Oceanic HW500P fluids should be stored in dry conditions, ideally out of direct sunlight. Normal storage temperature range is 5 to 40°C.

Material Compatibility

Oceanic HW500P fluids 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 HW500P fluids.

| | |
|--|--|
| Ferrous metals (cast iron, carbon steel, low & high alloy steels, stainless steels...) | Compatible |
| Non-ferrous metals (copper, brass, bronze and other metals and alloys*) | Compatible with alloys typically used in subsea production control equipment. Avoid Zn, Cd, Pb and Mg metals. Aluminum should be hard anodized. |
| Coatings and ceramic materials | Avoid porous coatings. Compatible with most ceramic parts. Check ceramic coatings |
| Packaging & sealing materials (elastomers and thermoplastics*) | Compatible with standard NBR, HNBR, FFKM, VMQ/FMVQ, CR, TFE/PTFE, PEEK. Some FKM & AU/EU/PU have proven to be incompatible |
| Umbilical hose liner thermoplastics | Compatible with Nylon 11, PE and Polyether ester copolymers |
| Absorbent gasket materials | Avoid cork, leather, cotton impregnated materials |
| Paints | 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 |
| Filter elements | Polypropylene and glass fiber filter elements recommended over paper filters |

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

MacDermid Offshore Solutions A Subsidiary of MacDermid Group

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