

## Oceanic HW500 Series

HW510, HW525, HW540, HW560

#### Subsea Production Control Fluids

## **Key Benefits**

- Industry standard fluids, field-proven since 1984
- ISO13628-6 specified, approved for use by all 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
- Fully compatible with Oceanic HW500P Series, HW500E Series, HW443, HW700 Series & XT900
- Manufactured to NAS 1638/AS 4059 Class 6/6b-f or better cleanliness
- Free Fluid Monitoring program ensures long service life

## Description

High-performance, water-based hydraulic fluids. Oceanic HW500 fluids are used in open and closed loop Subsea Production control systems and as industry standard fluids are specified by equipment manufacturers.

Oceanic HW500 series are compatible with each other and offer the same excellent technical performance. Fluids differ in glycol content to ensures optimal response times in all geographical regions. Variants of Oceanic HW500 fluids are also available for local/customer requirements (e.g. Oceanic HW500 P/XP/No Dye fluids).

#### Approvals

Oceanic HW540 is named in ISO13628-6 specification and is preferred by major equipment manufacturers.



Typical Physical Properties	Oceanic HW510	Oceanic HW525	Oceanic HW540	Oceanic HW560
Appearance	Clear Blue Fluid	Clear Blue Fluid	Clear Blue Fluid	Clear Blue Fluid
рН	9.4	9.4	9.4	9.4
Specific Gravity @15.6°C	1.02	1.039	1.06	1.08
Kinematic Viscosity (cSt) -20°C (-4°F)	Solid	Solid	18	40
0°C (32°F)	3.1	4.8	7.6	12
40°C (104°F)	1.0	1.5	2.1	2.9
Pour Point	-4°C (25°F)	-10°C (14°F)	-25°C (-13°F)	-50°C (-58°F)

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



# Oceanic HW500 Series

HW510, HW525, HW540, HW560

## Subsea Production Control Fluids

#### **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 HW500 fluids in your area can be obtained from our environmental specialists.

#### Storage

Oceanic HW500 fluids should be stored in dry conditions, ideally out of direct sunlight. Normal storage temperature range is 5 to 40°C.

## Material Compatibility

Oceanic HW500 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 HW500 fluids.

Ferrous metals (cast iron, carbon steel,low & high alloy steels, stainless steels)	Compatible
<b>V</b> 11 - 1	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
	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
	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

<sup>\*</sup> 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

#### **Manufacturing Locations**

**USA** 

MacDermid Offshore Solutions Ltd 223 N Brockman Pasadena, TX 77506 USA Tel: (US) 800 521 2589 Outside US: +1 713 472 5081

Fax: 713 472 2440

**United Kingdom** 

MacDermid Offshore Solutions UK MacDermid Anion Cale Lane, New Springs Wigan

WN2 1JR Tel: +44 (0)1942 501000 Fax: +44 (0)1942 501110

**Brazil** 

Rua Eli Walter Cesar, 110 Jd Alvorada Jandira, São Paulo Cep.: 06612-130 Tel: +55 11 4789 8585

Australia

MacDermid Offshore Solutions 29 Dennis Street Campbellfield, Melbourne Victoria 3061 Tel: +61 3 9303 5150 Fax: +61 3 9303 5166

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

