



## Hydromax HT ECO

Hydro treated based high performance readily biodegradable hydraulic fluid

### Description

Hydromax HT ECO is a range of high performance hydraulic and hydro turbine fluids, based on the latest technology hydro treated base oil and ash less (zinc free) additive technology. The use of special additive packs warrants optimal performance and a long service life. Hydromax HT ECO combines high viscosity – temperature characteristics with good extreme pressure and anti-wear properties for reliable and trouble-free performance even at high operating temperatures. The long lifetime of Hydromax HT ECO (up to 5 times longer than standard mineral Hydraulic oils) makes this product not only Biodegradable and non-toxic but very sustainable. The long life and cleanliness results in less waste material, low oil filter consumption and as a result of very low friction a proven lower energy consumption (between 3 and 5%) can be generated. Hydromax HT ECO has very good water separation properties which allow draining of water from systems when water intrusion is seen. Conductivity for Hydromax HT ECO is very low which allows this oil to work as a Transformer and Hydraulic oil at the same time.

### Applications

- Particularly suitable for hydraulic equipment & hydro turbines which are environmentally sensitive
- Can be used in all available hydraulic applications, as well as light gear boxes and is perfectly suitable for general lubrication purposes
- Suitable for ROV units
- Developed to provide trouble free operation, especially in cases where a conventional based

hydraulic fluid fails (sludge and deposit creation at higher temperatures etc.)

- Recommended for high pressure hydraulic systems or equipment operating over wide temperature ranges where it is critical to retain viscosity-temperature characteristics under high shear conditions
- The high viscosity index Hydromax HT ECO ensures a low start up viscosity, as also a stable protecting lubricating film at high operating temperatures
- Formulated to meet and exceed; Denison HF-0, Eaton Vickers M-2950-S and I-286-S, Bosch Rexroth DIN 515244 Part 3

### Benefits

- Excellent anti-wear protection
- Good emulsifying and air-release properties
- Good anti-oxidation for a long service life (up to 10.000 hours, ASTM D943)
- Lasts up to five times longer than the leading conventional hydraulic fluids
- Excellent anti-corrosion properties
- Excellent low & high temperature properties
- No sludge and deposit creation due to the absence of aromatics
- Zinc free formulation
- Low friction and therefore up to 5% less energy consumption in comparison with conventional hydraulic fluids

All performance data on this Technical Data Sheet are indicative only and can vary during production

**Matrix Specialty Lubricants BV - [info@matrix-lubricants.com](mailto:info@matrix-lubricants.com) - [www.matrix-lubricants.com](http://www.matrix-lubricants.com)**



### Typical performance data

	Test method	ECO 15	ECO 22	ECO 32	ECO 36	ECO 46	ECO 68	ECO 100
Appearance	Visual	Bright & clear						
Density @ 29,5 °C	ASTM D1298	0.827	0.860	0.840	0.840	0.845	0.860	0.869
Viscosity @ 40 °C, cSt	ASTM D445	15	22	32	35	45	71	100
Viscosity @ 100 °C, cSt	ASTM D445	4	5	6.3	7.3	8.9	11.9	13.5
Viscosity Index	ASTM D2270	175	150	165	165	165	162	137
Flash point, °C	ASTM D92	160	220	201	201	206	242	230
Pour point, °C	ASTM D97	-45	-35	-45	-45	-45	-39	-21
Copper corrosion test @ 100 °C / 3 hrs.	ASTM D130	1a	1a	1a	1a	1a	1a	1a
Rust preventive characteristics	ASTM D665AB	Passes	Passes	Passes	Passes	Passes	Passes	Passes
Emulsion characteristics	ASTM D1401	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)	40/40/0 (15)
T.A.N., mg KOH/g, max	ASTM D664	0.5	-	0.5	0.5	0.5	0.5	0.5
FZG	DIN 51354	12	-	12	12	12	12	12
Oxidation Resistance	ASTM D943	>10000	>10000	>10000	>10000	>10000	>10000	>10000
Foaming characteristics, 10 min	ASTM D892							
• Sequence I		Nil	Nil	Nil	Nil	Nil	Nil	Nil
• Sequence II		Nil	Nil	Nil	Nil	Nil	Nil	Nil
• Sequence III		Nil	Nil	Nil	Nil	Nil	Nil	Nil

All performance data on this Technical Data Sheet are indicative only and can vary during production

**Matrix Specialty Lubricants BV - info@matrix-lubricants.com – www.matrix-lubricants.com**