

**MATROL-BI ISO VG 46**  
**ISO 46 HETG hydraulic fluid**  
**FHV02A**  
**Technical Data Sheet**

**MATROL-BI**®

**DESCRIPTION**

MATROL-BI ISO VG 46 is a hydraulic fluid based on selected and refined natural esters. MATROL-BI ISO VG 46 is a renewable based biodegradable fluid able to offer an excellent oxidative stability with a low environmental and health impact profile. MATROL-BI ISO VG 46 is formulated with an ash less (no zinc) additive package providing specific anti-wear properties. MATROL-BI ISO VG 46 can be used in a wide variety of hydraulic systems for marine and terrestrial applications. MATROL-BI ISO VG 46 meets the technical specifications of ISO 15380 and fulfils the requirements of EU Ecolabel criteria (EU Ecolabel IT/027/001).



TYPICAL CHARACTERISTICS	ISO VG 46*	Unit	Test Method
Kinematic viscosity (@ 40°C)	43.0	mm <sup>2</sup> /s	ISO 3104
Kinematic viscosity (@100°C)	9.2	mm <sup>2</sup> /s	ISO 3104
Viscosity index	205	-	ISO 2909
Pour point	-27	°C	ISO 3016
Density	0,917	g/cm <sup>3</sup>	ISO 12185
Protection against copper corrosion (3 h/100°C)	1 a	Refer.	ISO 2160
Rust prevention (procedure A)	Pass	Refer.	ISO 7120A
Demulsivity	40/40/0 (10)	W/O/E (min)	ISO 6614
Suggested Temperature range	-10/+90	°C	Novamont
Biodegradability	Readily biodegradable	-	OECD 301B

\* These typical values are not intended for specification purposes.

**FEATURES & BENEFITS**

- Very high viscosity index (VI): viscosity remains constant over a wide range of temperatures. Performance stability as operating temperature increases combined with energy saving at low temperatures;
- Low volatility; low loss due to evaporation, less need for topping up and a healthier working environment;
- Excellent tribological properties: natural esters are composed of polar molecules, they are naturally more "lubricant" and can better prevent mechanical parts from wear. The low friction coefficient and the high lubricating power provide long life to the system and low energy consumption;
- High oxidative stability: the choice of high quality basestock provides a long lasting use;

**DISCLAIMER**

The information and data contained herein are believed to be accurate and are given in good faith. However, these data do not relieve users from carrying out own investigations and tests neither do these data imply any guarantee for certain properties nor the suitability of the product for a specific purposes. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

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- High cleaning power: due to their polar chemical nature, these lubricants are able to keep the system cleaner, avoiding the formation of deposits and enabling long oil filter life.
- Low flammability: mineral oils generally have a Flash point (closed vessel) around 150°C, while natural esters can exceed 250°C. Natural ester-based lubricants are safer against fire hazard.

### COMPATIBILITY

MATROL-BI ISO VG 46 is compatible with most synthetic and petroleum-based hydraulic oils. However mixing MATROL-BI ISO VG 46 with other oils, will modify MATROL-BI ISO VG 46 environmental profile (biodegradability) and characteristics. To ensure proper performance, it is recommended systems be drained and flushed prior to installation. MATROL-BI ISO VG 46 is compatible with standard seal materials, like HNBR, NBR1, AU and FKM 2 (ref. ISO 6072).

### HEALTH AND SAFETY

The product is not classified as hazardous according to Regulation (EC) No. 1272/2008 criteria. Observe good industrial/professional hygiene practices during use. Skin contact should be avoided. This product should not be used for purposes other than its intended scope. For more information, refer to the Material safety Data Sheet.

### HANDLING AND STORAGE

To prevent contamination, good storage and handling practices should be utilized when working with hydraulic fluids. Store fluid in original container protected from direct sunlight in a dry, cool and well-ventilated area. Keep container tightly closed and sealed until ready for use and dispense it only in clean containers. Keep above freezing. Keep dry.

### PACKAGING

MATROL-BI ISO VG 46 hydraulic fluid is available in the following packaging:

- 1000L IBC
- 220L drum

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