



# Rando<sup>®</sup> WM 32

## High performance multigrade hydraulic fluid

### Product description

Rando WM 32 is a high performance multigrade hydraulic fluid designed for use in wind turbine systems and a wide range of other applications. Rando WM 32 offers high level protection and performance under severe operating conditions.

Rando WM 32 provides good low temperature fluidity with a high viscosity index (VI) and therefore offers a wide operating temperature window. This product complies with Swedish Standard SS 15 54.34.

### Customer benefits

- Reliable low temperature fluidity promotes rapid pumpability and critical component wear protection during cold system start-up
- Robust anti-wear and corrosion inhibitor systems contribute to greater system uptime performance and reduced maintenance costs
- Thermal stability performance aids protection against oil degradation, deposit formation and promotes extended fluid service life
- Dependable filtration characteristics in the presence of water contamination helps reduce maintenance downtime
- High shear stability assists reliable protection and trouble-free performance under high temperature, high pressure conditions

### Product highlights

- **Wide temperature performance and extended fluid service life**
- **Low temperature system start-up wear protection**
- **System wear and corrosion resistance**
- **Filtration performance in the presence of water**
- **Trouble-free performance under high temperature, high pressure conditions**

#### Selected specification standards include:

DIN	ISO
Swedish Standard	Vestas
Vickers	

## Applications

- Rando WM 32 is recommended for use in wind turbines and in many types of high pressure hydraulic systems operating across a wide ambient and operating temperature range
- Rando WM 32 is suitable for systems with gear, vane, radial and axial piston pumps

## Approvals, performance and recommendations

### Approvals

- Vestas Wind Systems 0000-2843
- Vickers M-2950S, I-286

### Performance

- ISO 6743/V HV
- DIN 51 524/3, HLP
- Swedish Standard SS 15 54 34
- Swedish Standard SMR 1996-2

Typical test data		
Test	Test methods	Results
Viscosity Grade		32
Product Code		001793
Appearance	Visual	Bright & Clear
Kinematic Viscosity, 40°C, mm <sup>2</sup> /s	ISO 3104	32.0
Kinematic Viscosity, 100°C, mm <sup>2</sup> /s	ISO 3104	7.41
Viscosity Index	ISO 2909	211
Pour Point, °C	ISO 3016	-45
Flash point, °C	ISO 2592	172
Density at 15°C, kg/l	ASTM D1298	0.8910
FZG Damaged Load, A/8.3/90	DIN 51 354	11
Hours to TAN 2.0 mg KOH/g, h	ASTM D0943	2000+
TAN mg KOH/g	DIN 51558	0.45

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

**Disclaimer** Chevron accepts no liability for any loss or damage suffered as a result of using this product for any application other than applications specifically stated in any Product Data Sheets.

**Health, safety, storage and environmental** Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application and in accordance with the recommendations provided in the Material Safety Data Sheet (MSDS). MSDSs are available upon request through your local sales office, or via the Internet. This product should not be used for purposes other than its intended use. When disposing of used product, take care to protect the environment and follow local legislation.

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