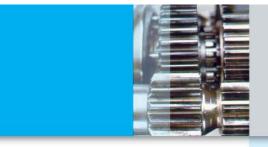


# Rando® HDZ 22

# Proven performance multi-viscosity anti-wear hydraulic oil

Product Data Sheet







#### **Product description**

Rando HDZ 22 is a proven performance multi-viscosity anti-wear hydraulic fluid designed to offer robust protection at 1000 pounds per square inch (PSI) where surge pressures may increase metal-to-metal contact and wear, by effectively plating out metal surfaces in vane-, piston-, and gear-type pumps.

Rando HDZ 22 is formulated with premium Group II base oil technology in combination with reliable additives to offer corrosion, oxidation, foam and aeration resistance, with dependable shear stable viscosity index (VI) improver performance, helping optimise system protection.

In laboratory testing, Rando HDZ 22 provided up to 5% improvement in overall hydraulic pump efficiency when compared with typical monograde hydraulic oil with VI<105 performance.

#### Customer benefits

- Premium Group II base oils and shear stable viscosity modifier offers high viscosity index for use over a wide temperature range
- Anti-wear additives protect against wear under load with rust and corrosion inhibitors designed for protection in steel and copper
- Good hydrolytic stability and water separation characteristics help prevent deposit formation and rust in the presence of water
- Oxidation inhibitors reduce oil thickening and deposits, offering improved filterability and foam suppression helping cut downtime

## **Product highlights:**

- Formulated for wide temperature use
- Designed to protect under load
- Offers good water separation
- Promotes reliable filterability

Selected specification standards include:

- Bosch Rexroth
- DIN
- US Steel











# **Applications**

- Industrial hydraulic equipment subject to a wide variation in operating temperature range
- Mobile, construction and agricultural equipment where water separation is critical
- Hydraulic systems with vane, gear or piston pumps
- Forklift trucks in refrigerated environments
- Plastic injection moulding machines
- Marine deck equipment, steering gear, thrusters and automatic controls
- Machine tools
- Enclosed gear systems (dependent on load)

## Approvals, performance and recommendations

#### Performance

DIN 51524-3 HVLP
Bosch Rexroth RE 90220
US Steel 127, 136







continued

## Typical data

RANDO HDZ 22		
TEST	TEST METHODS	RESULTS
Viscosity Grade		22
Product Code		802931
Kinematic viscosity at 40°C, mm²/s	ASTM D445	22
Kinematic viscosity at 100°C, mm²/s	ASTM D445	5.0
Viscosity Index	ASTM D2270	170
Flash Point COC, °C	ASTM D92	166
Pour Point, °C	ASTM D97	-39
Density at 15°C, kg/l	ASTM D4052	0.859
Copper corrosion (3 h, 100 °C)	ASTM D130	1A
Foam Seq. II (after blowing), ml	ASTM D892	10
Foam Seq. II (after 10' standing), ml	ASTM D892	0

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended.

Produced by Chevron Lubricants; Africa, Middle East and Pakistan.

<u>Environment, Health and Safety</u> Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit www.caltexoils.com.