



Rando[®] EP Ashless

Proven performance extreme pressure ashless hydraulic fluid

Product description

Rando EP Ashless are a range of proven performance extreme pressure ashless hydraulic fluids, designed for heavy-duty applications where anti-wear, extreme pressure and anti-corrosion properties are required.

Rando EP Ashless additive formulation contributes to operating and filtration performance in wet conditions, helping extend equipment reliability and service life. Rando EP Ashless meets the requirements of DIN specification 51524-2 (HLP oils).

Customer benefits

- Extreme pressure anti-wear performance offers robust protection in heavy-duty applications, helping extend equipment service life
- Ashless additive formulation offers improved operating and filtration performance in water contaminated systems
- Demulsification and air release performance helps ensure optimum operating performance and system protection
- Promotes system corrosion protection and reduced system downtime

Product highlights

- **Extreme pressure anti-wear resistance**
- **Improved wet operation and filtration**
- **Demulsification and air release performance**
- **System corrosion protection**

Selected specification standards include:

DIN	ISO
Vickers	Cincinnati Milacron
Krauss Maffei Kunstoftechnik	

Applications

- Rando EP Ashless fluids are recommended for a wide range of hydraulic equipment where anti-wear, extreme pressure and anti-corrosion properties are required. This is required in cases of high thermal stress or contamination by water. In order to improve the anti-wear / EP and anti-corrosion properties of the oil, special additives are incorporated in the formulation
- Rando EP Ashless oils have been used successfully in hydraulic presses and plastic extruders

Please note: Rando EP Ashless shows limited compatibility with ZnDTP based hydraulic oils and engines oils which can lead to filter blockage. It is therefore recommended not to top-up systems with Zn-containing hydraulic oils and thoroughly flush the system when switching from one technology to the other.

Approvals, performance and recommendations

Performance

- DIN 51524-2 class HLP
- ISO 6743-4 class L-HM
- ISO 11158 HM
- Vickers I-256-S
- Cincinatti Milacron P-68, P-69, P-70
- Krauss Maffei Kunststofftechnik Hydraulic Oil spec

Typical test data			
Test	Test methods	Results	
Viscosity Grade		46	68
Product Code		033463	033464
Appearance	Visual	B&C	B&C
Visc. Kinematic at 40°C	ISO 3104	46	68
Visc. Kinematic at 100°C	ISO 3104	6.7	8.6
Visc. Index	ISO 2909	101	99
Colour	ISO 2049	0.5	0.5
Flash Point, °C	ISO 2592	230	238
Pour point, °C	ISO 3016	-30	-27
TAN, mg KOH/g	DIN 51558/1	0.11	0.12
Density, 15°C, Kg/l	ASTM D1298	0.8789	0.8756
FZG A/8.3/90, Fail. load stage	DIN 59354	12	12
Cu Corrosion, 3h, 100°C	ASTM D130	1B	1B
Sulphated Ash, wt %	ASTM D874	0.02	0.02
Hours to Neut. Nr. 2.0 mgKOH/g, hrs	ASTM D943	+3000	+3000

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.

A Chevron company product