

ECOSURE RANGE

Instructions for Use

ECOSURE is a range of environmentally acceptable, high performance and anti-wear hydraulic fluids. These HEES fluids are based on renewable esters and use state-of-the-art ashless, zinc-free technology. These biodegradable lubricants behave differently to traditional mineral based hydraulic oils.

We recommend that the **ECOSURE RANGE** is used in accordance with the following guidelines:

1. The **ECOSURE** grades are suitable for use in hydraulic systems operating at temperatures in the range of -35°C to 100°C. **ECOSURE HSE** is recommended for prolonged exposure to high temperatures.
2. Any previous fluid in use in the system should be thoroughly drained and all filters renewed.
3. Carry-over of previous mineral or ester based hydraulic fluid should not be more than 5% of the total system capacity to avoid any compatibility issues.
4. The equipment manufacturer's fluid viscosity guidelines should be adhered to. These will normally be available in the equipment manual.
5. **ECOSURE** grades should be filled via a fine filter, preferably 10-micron absolute pore size, to remove any possible contamination that may occur once the packaging is opened.
6. Any top-up of the system should be with the same grade of **ECOSURE**. Do not mix with other fluids including other biodegradable hydraulic fluids.
7. Water content should not exceed 1000 ppm (0.1%). Any free water should be separated off on a regular basis. Use of a hygroscopic breather on the equipment to absorb airborne moisture is recommended, particularly in tropical climates.
8. Representative samples (minimum 100 ml) ideally should be sent to Vickers Oils for analysis within one month of sampling date in accordance with the following schedule:
 - i. On initial running (i.e. Within the first 10 operating hours)
 - ii. At the earlier of one month or 100 operating hours
 - iii. At the earlier of three months or 300 operating hours
 - iv. Every three months or 300 operating hours thereafter

In case of any issues arising from the sample analysis, all recommendations by Vickers Oils should be followed.

Vickers Oils, its officers, employees and agents assume no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with Vickers Oils for the provision of this information or advice and in that case responsibility or liability is exclusively on the terms and conditions set out in that contract. These products should only be used for the applications specified. The supplier cannot accept responsibility if it is used in any other applications.

BENJ^M R. VICKERS & SONS LTD.

Registered Office
6 Clarence Road, Leeds,
LS10 1ND, United Kingdom

Registered in England
Company No. 00130013

Tel: +44 (0)113 386 7654
Fax: +44 (0)113 386 7676
Email: techserv@vickers-oil.com
Web: www.vickers-oil.com

Accredited to the ISO 9001
Quality Standard and the ISO
14001 Environmental
Management Standard



FM 1851



EMS 40717