



COAST LUBRICANTS & INDUSTRIAL SUPPLY

ECOSYNTHETIC HYDRAULIC FLUID

SynBio™ Series
SB-ES25

ES25 is a biodegradable synthetic oil specifically designed to meet the environmental requirements of mobile and stationary hydraulic systems operating in sensitive areas.

Based on synthetic esters and carefully designed additives **ES25** is a premium performance hydraulic oil suitable for hydraulic systems operating under severe conditions and requiring fluids with excellent thermal stability over a wide temperature range.

Because of its excellent biodegradability and very low ecotoxicity, **ES25** is particularly recommended anywhere leaking, spills or ruptured hydraulic lines may present an environmental hazard. Typical applications include: forestry works, construction, logging and farming equipment, public works, lawn and turf care, water navigation, off-shore, water catchments areas, ski resorts, etc.

ES25 is recommended for stationary and mobile applications using gear, vane and piston hydraulic systems operating under high pressure and temperatures ranging from -45°C to 100°C.

Consult the manual of the manufacturer for the appropriate grade.

ES25 is compatible with the most conventional mineral and synthetic hydraulic fluids, however, for optimum performance, it is recommended to drain and clean the system before transition to **ES25**. Thermal-Lube recommends the use of **XL9524** flushing and rinsing fluid.

Using Thermal-Lube's **COAT®** system analysis program, Thermal-Lube can certify that your equipment uses a biodegradable fluid that meets the **OECD 301B** standard.

- Biodegradable formulation (OECD 301b ≥ 80%)
- Low aquatic toxicity
- Formulated from a minimum of 80% renewable resources
- Efficient operation over a wide temperature range (-45°C to 100°C).
- Hydrolytic and thermal stability
- Resists oxidation resulting in fewer oil changes
- Exceptional wear protection
- Protects against rust and foaming
- Compatible with most seals and joints
- Easily separates from water and debris
- Keeps system clean for extended periods

ECOSYNTHETIC HYDRAULIC FLUID

**SynBio™ Series
ES25**

ES25 meets or surpasses the following specifications:

- Cincinnati Machine P-68, P-69, P-70
- U.S. Steel 127, 136 / German Steel SEB 181222
- DIN 51524 Parts 1 and 2, Type HLP
- DIN 51506, VDL
- GE Turbine Specifications [GEK 32568E (ISO 32) & GEK 28143A]
- Denison HF-0, HF-1, HF-2
- ISO 11158:1997, Family H, Type HM
- Bosch Rexroth RE 90220, Type HLP
- Eaton Vickers, I-286-S, M-2950, 35VQ25A

TYPICAL SPECIFICATIONS

Product Code: ES25	/013	/015	/022	/032	/046	/068
ISO Grade	10/15	15	22	32	46	68
Viscosity (cSt @ 40°C) (ASTM D445)	13.5	15.23	22.13	29	44.2	65
Viscosity (cSt @ 100°C) (ASTM D445)	3.8	4.04	5.49	7	8.51	12.57
Viscosity Index (ASTM D2270)	189	177	203	218	173	198
Flash Point (°C) (ASTM D92)	210	220	220	220	220	320
Pour Point (°C) (ASTM D97)	-63	-60	-60	-56	-54	-30
Density (g/ml)	0.90	0.899	0.895	0.901	0.907	0.904
Colour	Light Yellow					
OECD 301B (28 Days)% Biodegradation	80	80	80	80	80	76