



EAF™ 400 LL Series Biodegradable Hydraulic Fluids

T E C H N I C A L D A T A S H E E T

Specially formulated for hydraulic systems requiring environmentally acceptable lubricants

Description

ProEco® EAF™ 400 LL “Long Life” Series Biodegradable Anti-Wear (AW) Hydraulic Fluids are formulated from biodegradable non-toxic base-stocks that afford exceptional oxidation and thermal properties, and advanced additive systems to impart performance properties required for mobile and stationary hydraulic systems operating in environmentally sensitive areas.

Advantages

- Biodegradable and practically non-toxic for environmental protection
- Superior system wear protection at elevated temperatures
- Excellent compatibility with materials of construction
- Excellent oxidative properties
- Extended service life for very long drain intervals

Applications

ProEco® EAF™ 400 LL “Long Life” Series Biodegradable (AW) Hydraulic Fluids are recommended for most types of hydraulic systems using vane, gear, and piston type pumps operating under extremes of both temperature and pressure where a biodegradable and virtually non-toxic fluid is desirable.

Recommendations and Approvals

Agricultural, Construction, Dredging, Forestry, Marine, Off Shore, Mining, Tunnel Boring and Waste Handling are some of the industries utilizing ProEco® EAF™ 400 LL “Long Life” Series Biodegradable (AW) Hydraulic type fluids.

Product	ProEco® EAF™ 432 LL	ProEco® EAF™ 446 LL	ProEco® EAF™ 468 LL	
Typical Properties				
ISO Viscosity Grade	32	46	68	<i>Test Method</i> ASTM D-2422
Viscosity, cSt.				ASTM D-445
40°C	32.21	46.90	67.69	
100°C	6.19	8.16	10.80	
0°C	269	448	701	
-20°C	1,473	2,460	4,511	
-30°C	4,258	7,903	14,120	
Viscosity Index	144	148	150	ASTM D-2270
Pour point, °C (°F)	-36 (-35)	-36 (-35)	-45 (-45)	ASTM D-97
Flash point, °C (°F)	190 (375)	200 (390)	210 (410)	ASTM D-92
Rust, Test	Pass	Pass	Pass	ASTM D-665B
FZG, Pass stage	12	12	12	ASTM D-5182
Oxidation Stability, dry, Hrs to AV change >2	>3000	>3000	>3000	ASTM D-943
Specific Gravity, 15.6°C (60°F)	0.9114	0.9393	0.9626	ASTM D-4052
Density, g/L 15.6°C (lbs/gal, 60°F)	911 (7.589)	939 (7.822)	963 (8.016)	Conversion
API Gravity, 15.6°C (60°F)	23.8	19.2	15.5	ASTM D-1298
Biodegradability, %	>60	>60	>60	ASTM D-5864



Cognis SynLubes Technology is certified under ISO 9001 and QS-9000.

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