

READILY BIODEGRADABLE ISO 100 HYDRAULIC FLUID

Description

RSC *EnviroLogic*[®] HF 100 hydraulic fluid is a readily biodegradable, biobased ISO 100 grade hydraulic oil for use in general purpose hydraulic systems. It is based on natural ester technology and is a direct replacement for petroleum oil based hydraulic fluids of the same viscosity. The product demonstrates excellent low and high temperature viscosity performance and has superior anti-wear characteristics. RSC *EnviroLogic*[®] HF 100 has reduced environmental impact in the event of a leak or spill, as it is readily biodegradable and non-sheening*.

It is an Environmentally Acceptable Lubricant (EAL) compliant with 2013 US EPA Vessel General Permit (VGP).

RSC *EnviroLogic*[®] HF series meets the requirements for various manufacturers. Visit our [website](#) or contact customer service for a full list of OEM approvals.

Property	Method	Requirements	Result
Kinematic Viscosity	D445		
At 40°C, cSt		90.0 – 110.0	100
At 100°C, cSt			18.1
Viscosity Index	D2270	90 min	201
Density (60°F), kg/m ³	D4052	Report	920
Density (60°F), lbs/gal	D4052	Report	7.66
API Gravity (60°F)	D1298	Report	22.3
Pour Point, °C	D97	-15 max	-33
Flash Point (COC), °C	D92	185 min	205
Acid Number, mgKOH/g	D664	Report	0.30
Steel Pin Corrosion (4 hours, 100°C)	D665	Pass	
Deionized Water			Pass
Synthetic Salt Water			Pass
Copper Corrosion (3 hours, 100°C)	D130	2 max	1B
Foam Properties (after 10 minutes)	D892		
Sequence I, mL	Tendency- Stability	50-0 max	50-0
Sequence II, mL	Tendency- Stability	50-0 max	50-0
Sequence III, mL	Tendency- Stability	50-0 max	50-0

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Demulse Properties (54°C) Oil / Water / Emulsion Minutes	D1401	40 / 37 / 3 30 max	40 / 40 / 0 30
Hydrolytic Stability Copper Weight Loss, mg/cm ³ Change in Acid Number, mgKOH/g Appearance of Copper Panel	D2619		0.09 0.09 1B
Four Ball Wear 75°C, 1200 rpm/ 40 kg/ 1 Hr.	D4172		0.67
Vickers 35VQ25 Vane Pump**	35VQ25		Pass
Vickers V104C Vane Pump** Total loss of ring and vane, mg			3.9
FZG (A/8.3/90), fail load**	D5182	10	10
Biodegradability	D7373	>60	>60
Ecotoxicity Fathead minnow, 96h LC50, ppm Daphnia magna, 48h EC50, ppm Algae, 72h EC50, ppm	OECD 203 OECD 202 OECD 201	>100 >100 >100	>10,000 >100 >100
Elastomer SRE-NBR-1 (100°C 168 hours)	D471	Pass	Pass
Elastomer HNBR (100°C 168 hours)	D471	Pass	Pass
Elastomer FKM (100°C 168 hours)	DIN 1817	Pass	Pass
Compatibility with Select Hydraulic Fluids Biodegradable Competitor stored @ 100°F Biodegradable Competitor stored @ -5°F Petroleum Hydraulic Fluid stored @ 100°F Petroleum Hydraulic Fluid stored @ -5°F		Pass Pass Pass Pass	Pass Pass Pass Pass

*CFR40 Part 435B

**based on read across from RSC *EnviroLogic*® HF 46.

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For more information about RSC Bio Solutions, visit us at rscbio.com or call +1 704.684.6100.



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