

HIGH PERFORMANCE, READILY BIODEGRADABLE ISO 68 HYDRAULIC FLUID

Description

RSC *EnviroLogic*® HF 68 HP is a high performance, readily biodegradable, synthetic ISO 68 grade hydraulic fluid. It is intended for severe service, extreme high temperature (250°F / 121°C), low temperature (-40°F / -40°C) and high pressure (5000+ psi / 34,470 kPa) applications. It exhibits enhanced wear protection, cleanliness and longer life than conventional petroleum hydraulic oils. RSC *EnviroLogic*® HF 68 HP can directly replace petroleum oil based hydraulic fluids of the same viscosity, yet has reduced environmental impact in the event of a leak or spill, as it is readily biodegradable and non-sheening*.

RSC *EnviroLogic*® HF 68 HP is certified as an Environmentally Acceptable Lubricant (EAL) compliant with 2013 US EPA Vessel General Permit (VGP). Meets the ISO classification Hydraulic Environmental Polyalphaolefin and related hydrocarbon products (HEPR) per ISO 6743-4.

RSC *EnviroLogic*® HF HP 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			
At 40°C, cSt	D445	61.2-74.8	68
At 100°C, cSt	D445	7.8 min	13.5
Viscosity Index	D2270	90 min	176
Density(60°F), kg/m ³	D4052	report	856
Pour Point, °C	D97	-15 max	<-46
Flash Point (COC), °C	D92	185 min	184
Acid Number, mgKOH/g	D664	Report	0.30
Steel Pin Corrosion (3 hours, 100°C)	D665	Pass	
Deionized Water			Pass
Synthetic Salt Water			Pass
Foam Properties (after 10 minutes)	D892		
Sequence I, mL	Tendency/Stability	50-0 max	10-0
Sequence II, mL	Tendency/Stability	50-0 max	50-0
Sequence III, mL	Tendency/Stability	50-0 max	10-0
Copper Corrosion	D130		
3hrs @ 100 °C		2 max	1a
Oxidation	D2272		
Mins to 25 psi loss			400-500

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Demulse Properties (54°C) Oil / Water / Emulsion Minutes	D1401	40/37/3 30	40/40/0 15
FZG		10 min.	12 Pass
Hydrolytic Stability Copper Weight Loss, mg/cm ³ Change in Acid Number, mgKOH/g Appearance of Copper Panel	D2619		0.00 0.00 1b
Vickers 35VQ25 Vane Pump**	35VQ25		Pass
Vickers V104C Vane Pump** Total loss of ring and vane, mg			Pass
Denison T6H20C Pump** HF-1, HF-2, HF-6			Pass
Biodegradability, %	D7373		>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	>1,000 >120 >110
Elastomer Compatibility** SRE-NBR-1 (100°C 168 hours) HNBR (100°C 168 hours) PU (100°C 168 hours) FKM (100°C 168 hours)	D471 D471 DIN 1817 DIN 1817		Pass Pass 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

***CFR40 Part 435B**

**** based on read across from RSC *EnviroLogic* HF46 HP**

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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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