

READILY BIODEGRADABLE ISO 68 HYDRAULIC FLUID

Description:

RSC *EnviroLogic*® HF 68 hydraulic fluid is a readily biodegradable, biobased ISO 68 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. RSC *EnviroLogic*® HF 68 exceeds the requirements of petroleum based hydraulic fluids. It is intended for use in applications with temperature requirements ranging from -20°F to 200°F and pressure requirements up to 5000 psi. It 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		61.2 – 74.8	68
At 100°C, cSt		7.8 min	14.5
Viscosity Index	D2270	140 min	224
Density (60°F), lbs/gal	D4052	Report	7.66
API Gravity (60°F)	D1298	Report	22.3
Pour Point, °C	D97	-18 max	-36
Flash Point (COC), °C	D92	185 min	230
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
Demulse Properties (54°C)	D1401		
Oil / Water / Emulsion		40 / 37 / 3	40 / 40 / 0
Minutes		30 max	30

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Hydrolytic Stability	D2619		
Copper Weight Loss, mg/cm ³			0.09
Change in Acid Number, mgKOH/g			0.09
Appearance of Copper Panel			1B
Four Ball Wear 75°C/ 1200 rpm/ 40 kg/ 1 Hr.	D4172		0.37
Vickers 35VQ25 Vane Pump**	35VQ25		Pass
FZG (A/8.3/90), fail load**	D5182	10 min	11
Vickers V104C Vane Pump**	ISO 20763		
Loss of ring, mg		120 max	1.9
Total loss of vanes, mg		30 max	4.8
Denison HF-6 Hybrid Pump**	T6H20C		
Total loss of pistons, mg		300 max	186.7
Total loss of vanes and pins, mg		15 max	1.4
Biodegradability	D7373	>60	>60
Ecotoxicity			
Fathead minnow, 96h LC50, ppm	OECD 203	>100	>10,000
Daphnia magna, 48h EC50, ppm	OECD 202	>100	>100
Algae, 72h EC50, ppm	OECD 201	>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		Pass	Pass
Biodegradable Competitor stored @ -5°F		Pass	Pass
Petroleum Hydraulic Fluid stored @ 100°F		Pass	Pass
Petroleum Hydraulic Fluid stored @ -5°F		Pass	Pass

*CFR40 Part435B

**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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