

HIGH PERFORMANCE, READILY BIODEGRADABLE ISO 32 HYDRAULIC FLUID

Description

RSC *EnviroLogic*® HF 32 HP hydraulic fluid is a high performance, readily biodegradable, synthetic ISO 32 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 32 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 32 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	28.8-35.2	33
At 100°C, cSt	D445	5.0 min	7.2
Viscosity Index	D2270	90 min	190
Density(60°F), kg/m ³	D4052	report	851
Pour Point, °C	D97	-15 max	-54
Flash Point (COC), °C	D92	185 min	185
Acid Number, mgKOH/g	D664	Report	0.30
Steel Pin Corrosion (4 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		400-500
Mins to 25 psi loss			

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Demulse Properties (54°C)	D1401	<u> </u>	
Oil / Water / Emulsion		40/40/0	40/40/0
Minutes		30	5
FZG		10 min.	12 Fail
Hydrolytic Stability	D2619		
Copper Weight Loss, mg/cm ³		0.2	0.00
Change in Acid Number,		4.0	0.00
mgKOH/g			
Appearance of Copper Panel			1b
Vickers 35VQ25 Vane Pump**	35VQ25		Pass
Vickers V104C Vane Pump**			
Total loss of ring and vane, mg	<u> </u>		Pass
Denison T6H20C Pump**			
(HF-1, HF-2, HF-6)			Pass
Biodegradability, % in 28 Days	D7373		>60
Ecotoxicity			
Fathead minnow, 96h LC50,	OECD 203	>100	>1,000
ppm			
Daphnia magna, 48h EC50,	OECD 202	>100	>120
ppm			
Algae, 72h EC50, ppm	OECD 201	>100	>110
Elastomer Compatibility*			
SRE-NBR-1 (100°C 168 hours)	D471		Pass
HNBR (100°C 168 hours)	D471		Pass
PU (100°C 168 hours)	DIN 1817		Pass
FKM (100°C 168 hours)	DIN 1817		Pass
Compatibility with Select Hydraulic Fluid			
Biodegradable Competitor stored @ 100°F			Pass
Biodegradable Competitor stored @ -5°F			Pass
Petroleum Hydraulic Fluid stored @ 100⁰F			Pass
Petroleum Hydraulic Fluid store	d @ -5°F		Pass

^{*}CFR40 Part 435B

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



^{**} based on read across from RSC EnviroLogic HF 46 HP