

Readily Biodegradable* Hydraulic Fluids

The RSC EnviroLogic[®] HF Series consists of readily biodegradable lubricants designed for general purpose hydraulic systems. These proven products are ideal for mobile hydraulic systems operating in environmentally sensitive areas, such as utility fleets, mobile turf care equipment and security barriers. Additionally, this series can be used in select marine applications such as ROV units and pile driving equipment.

In fact, with the exception of RSC EnviroLogic 15, the entire HF series meets the USDA BioPreferred® biobased content minimum requirements. Plus, the RSC EnviroLogic HF Series offers superior wear protection and changeover intervals equal to or longer than petroleum based hydraulic oils.

- 2013 EPA VGP Compliant
- Certified as an Environmentally Acceptable Lubricant (EAL)
- Non-sheening**
- Readily biodegradable, biodegrades \geq 60% within 28 days*

Typical Properties		RSC EnviroLogic [®] HF Series							
RSC EnviroLogic [®] Product Number		HF 15	HF 22	HF 32	HF 46	HF 68	HF 100		
ISO Viscosity Grade		15	22	32	46	68	100		
Kinematic Viscosity,	@ 100°C	4.1	5.5	7.0	10.4	14.5	18.1		
ASTM D445 cSt,	@ 40°C	15.8	22	32	46	68	100		
Viscosity Index, ASTM D2270		172	206	189	224	224	201		
Pour Point, ASTM D97, °C		-63	-42	-39	-36	-36	-33		
Flash Point, ASTM D92, °C		177	180	205	270	230	220		
Specific Gravity, 60°F, ASTM D1298		0.84	0.88	0.90	0.92	0.92	0.92		
Density, 15.6°C (60°F), lbs/gal		7.01	7.30	7.52	7.66	7.66	7.66		
API Gravity, 15.6°C (60°F)		35.0	29.9	25.2	22.3	22.3	22.3		

Performance Properties		RSC EnviroLogic® HF Series							
RSC EnviroLogic [®] Product Number		HF 15	HF 22	HF 32	HF 46	HF 68	HF 100		
Foam Properties, ASTM D892	Sequence I, Tendency/Stability	50/0	50/0	50/0	50/0	50/0	50/0		
	Sequence II, Tendency/ Stability	50/0	50/0	50/0	50/0	50/0	50/0		
	Sequence III, Tendency/ Stability	50/0	50/0	50/0	50/0	50/0	50/0		
Demulse Proper- ties, ASTM D1401	Oil/Water/Emulsion	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0	40/40/0		
	Minutes	30	30	30	30	30	30		

*As per OECD 301B or ASTM D7373 **CFR40 Part 435B



RSC ENVIROLOGIC® HF SERIES

Performance Properties (cont.)		RSC EnviroLogic [®] HF Series						
RSC EnviroLogic [®] Product Number		HF 15	HF 22	HF 32	HF 46	HF 68	HF 100	
Biodegradability, ASTM D7373, %		> 60	> 60	> 60	> 60	> 60	> 60	
	Fathead Minnow LC50 ppm, 96 h	> 10,000	> 10,000	> 10,000	> 10,000	> 10,000	> 10,000	
Aquatic Toxicity	Daphnia Magna, EC50 ppm, 48 h	> 100	> 100	> 100	> 100	> 100	> 100	
	Algae EC50, ppm	> 100	> 100	> 100	> 100	> 100	> 100	
BioPreferred ¹ (≥	BioPreferred ¹ (≥ 44% biobased content)		Yes	Yes	Yes	Yes	Yes	
	SRE-NBR (100°C, 168 hours)	Pass	Pass	Pass	Pass	Pass	Pass	
Elastomer Compatibility	HNBR (100°C, 168 hours)	Pass	Pass	Pass	Pass	Pass	Pass	
	FKM (150°C, 168 hours)	Pass	Pass	Pass	Pass	Pass	Pass	
Vickers V104C P	Vickers V104C Pump Test, ASTM D7043		-	Pass	Pass	Pass	Pass	
Vickers 35VQ25 Pump Test, 150 Hours		-	-	Pass	Pass	Pass	Pass	
Vickers 35VQ25 Exter	Vickers 35VQ25 Extended Pump Test, 500 Hours		-	Pass	Pass	Pass	Pass	
Denison T5D & Dension P-46 ²		-	-	Pass	Pass	Pass	Pass	
Denison T6H20C Pump Test		-	-	Pass	Pass	Pass	Pass	
FZG ² , ASTM D5182		-	-	10 Fail	10 Fail	10 Pass	10 Pass	

The products meet most MIL performance specifications for environmentally safe antiwear hydraulic fluids.

1 USDA BioPreferred lubricant categories target > 44%.

2 Read across from previous approval with similar components and base oils.

OEM Approvals

RSC EnviroLogic® HF Series meets the requirements for various manufacturers. Visit our website or contact customer service for a full list of OEM approvals.



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



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