

HIGH PERFORMANCE, READILY BIODEGRADABLE ISO 220 HYDRAULIC FLUID

Description

RSC *EnviroLogic*® HF 220 HP hydraulic fluid is a high performance, readily biodegradable, synthetic ISO 220 grade hydraulic fluid. It is intended for severe service, extreme high temperature (250°F), low temperature (-40°F) 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 220 HF can directly replace petroleum oil based hydraulic fluids, yet has reduced environmental impact in the event of a leak or spill, as it is readily biodegradable and non-sheening*.

RSC *EnviroLogic*® HF 220 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.

Typical Properties

Flash Point, °F	ASTM D92	345
Specific Gravity, 60°F	ASTM D4052	0.852
ISO Viscosity Grade	ISO	220
Viscosity @ 40°C, cSt	ASTM D445	230.0
Viscosity @ 100°C, cSt	ASTM D445	37.0
Viscosity Index	ASTM D2270	> 210
Pour Point, °C	ASTM D97	-32

Performance Properties

Foam, ASTM D892 Sequence I, II, III		Pass
Rust, ASTM D665 B (Synthetic Sea Water)		Pass
Copper Corrosion, ASTM D130 3 hrs @ 100°C		1a
Hydraulic Pump Test, ASTM D2282 ring and vanes		Pass
Hydrolytic stability, ASTM D2619 copper loss / appearance/ NNA		-0.008/1b/+0.01

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Wear Performance

Four Ball Wear, ASTM D4172

1 hr., 302°F, 1800 rpm, 40 kg, scar mm 0.43

Demulsibility, ASTM D1401 @ 82°C

Oil / Water / Emulsion (time, minutes) 40 / 40 / 0 (10)

Oxidative Stability

ASTM D2272

RBOT, @ 150°C, min. 400 – 500

Static Oxidation Test

168 hrs @ 150°C

condition of beaker clean

Biodegradability

OECD 301 B, % in 28 days

> 60

Ecotoxicity, EPA/60/4-90/0275

Fathead minnow, 24h LC50, ppm

>5,000

Fathead minnow, 48h LC50, ppm

>5,000

Pump Performance

Vickers 35VQ25 Pump

(300 psi, 2400 rpm, 200°F) Pass

Seal Compatibility

Buna-N

Pass

Polyurethane

Pass

Viton

Pass

Neoprene

Pass

* CFR40 Part 435B

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