

GreensCare 68

Biodegradable Hydraulic Fluid

Manufactured exclusively for Jacobsen, A Textron Company, by

Terresolve Technologies Ltd.
 35585 Curtis Blvd.
 Eastlake, OH 44095
www.terresolve.com
 Phone: (440) 951-8633
 FAX: (440) 951-4341

Description

GreensCare 68 Hydraulic Fluid is a readily biodegradable, non-hazardous ISO 68 / SAE 5W40 viscosity grade hydraulic oil for use in general purpose hydraulic systems. GreensCare 68 is based on natural ester technology and is a direct replacement for petroleum oil based hydraulic fluids. GreensCare 68 is approved against Jacobsen and Cushman requirements and meets or exceeds the requirements of Ransomes, Toro, Deere and others. The product demonstrates excellent low and high temperature viscosity performance and has superior anti-wear characteristics.

Typical Properties

Flash Point, C	ASTM D-92	>250°
Specific Gravity, 60° F	ASTM D-1298	0.92
Kinematic Viscosity @ 40° C, cSt	ASTM D-445	61.2 – 74.8 (ISO 68)
Kinematic Viscosity@100C, cSt	ASTM D-445	12.5 – 16.3
Viscosity Index	ASTM D-2270	215
Pour Point	ASTM D-97	-36°C
Brookfield viscosity @ -30° C, cPs	ASTM D-2983	6200

Performance Properties

Foam, Sequence I, II, III	ASTM D-892	Pass
Copper Corrosion, 3 hours @ 100° C	ASTM D-130	1a
Hydrolytic stability,	ASTM D-2619	

Copper loss / appearance/ NNA 0.09 / 1b / 5.0

Performance Properties (Cont'd)

Filterability, seconds

A.) without water, 600 max 127.6

Rust, ASTM D-665 A (Distilled Water)

Pass

Rust, ASTM D-665 B (Synthetic Sea Water)

Pass

Demulsibility ASTM D-1401

oil / water / emulsion (minutes) 40-40-0 (20)

Wear Performance

Four Ball Wear, ASTM D-4172

1 hr., 167° F, 1800 rpm, 40 kg., scar mm. 0.42

Timken Wear, ASTM D-2782

OK Load, lbs. 40 - 50

Hydraulic Pump Test, ASTM D-2882

mg. wt. loss, ring and vanes 3.8

Oxidative Stability

Oxidative Stability, ASTM D-2272

RBOT, min. to 25 psi loss 80 - 100

Static Oxidation Test

168 hrs. @ 150° C

condition of beaker

clean

Biodegradability

Biodegradability (%)

CEC L-33 T-82

93

OECD 301B

>60