



PRODUCT DATA SHEET

DAVID WEBER OIL CO.

601 Industrial Road • Carlstadt, NJ 07072 | 201.438.7333 phone | 201.438.3178 fax

www.weberoil.com

GIBRALTAR BIO-SAFE

Premium Oxidatively and Thermally Stable Biodegradable Hydraulic Oil

Gibraltar Bio-Safe was developed in response to growing environmental concern over ground soil and water supply contamination. The main objective in the formulation of Gibraltar Bio-Safe was to create a readily biodegradable hydraulic oil without sacrificing the stringent performance requirements of hydraulic/circulating systems. Incorporating the newest technology in super-stabilized vegetable oil as well a unique oxidation inhibition system, Bio-Safe provides a fully biodegradable hydraulic fluid with oxidative and thermal stability previously only available with expensive synthetic oils.

Wherever a premium grade anti-wear hydraulic oil is required in an application where ground soil contamination is a possibility, the safest choice for your equipment and the environment is **Gibraltar Bio-Safe**.

Summary of Benefits:

- Biodegradable
- Higher viscosity index
- Oxidation stability on par with more expensive synthetics
- Less pump wear*
- Better lubricity allows smoother operation
- Higher flash point

* As measured by ASTM D 4172 4-Ball Wear Test.

TYPICAL INSPECTIONS	TEST METHOD	32	46	68
Flash Point (COC), °C	ASTM D-92	232	240	248
Kinematic Viscosity, cSt				
@ 40°C	ASTM D-445	30.5	43.1	62.8
@ 100°C	ASTM D-445	6.7	8.8	11.9
Pour Point, °C	ASTM D-97	-35	-33	-30
Viscosity @ -25°C, cP	ASTM D-2983	1400	3400	4700
Iron Corrosion	ASTM D-665			
A. Distilled Water		Pass	Pass	Pass
B. Syn. Sea Water		Pass	Pass	Pass
Copper Corrosion				
3hrs @ 100°C	ASTM D-130	1A	1A	1A
Foaming Tendency/Stability	ASTM-892			
Sequence I, II, III		0/0	0/0	0/0
Rotary Bomb Oxidation				
Minutes	ASTM D-2272	272	270	260
Demulsibility, (10 Minutes)				
Oil/Water/Emulsion	ASTM D-1401	40/40/0	40/40/0	40/40/0
4 Ball Wear, 1h, 167°F, mm				
1200 rpm, 40kg	ASTMD-4172	0.40	0.40	0.40
FZG Test	DIN 51354	11	11	11
Biodegradation Classification	ASTM D-5864	-----Ultimate PW1-----		
Environmentally Friendly	ISO 15380	-----Yes-----		
USDA Biobased Tested	New Carbon	-----Yes-----		