

**Overview** ▶ BioFlo Synthetic AW oils are formulated using the latest **eSyn™** technology to maximize wear performance and oxidative life. BioFlo Synthetic AW's are a unique blend of full synthetic, renewable and biodegradable base oils coupled with the latest additive technology. This exciting new formulation offers high thermal and oxidative stability which reduces operating temperatures and increases fluid and component life. This product is recommended for stationary industrial, mobile equipment and anywhere a HEES synthetic is recommended.



BioFlo Synthetic AW fluids are available in ISO grades 32, 46, 68.

## Typical Properties ▼

Property	ASTM Test Method	Syn AW 32	Syn AW 46	Syn AW 68
Product Code		BF2100232	BF2100246	BF2100268
ISO Grade		32	46	68
Specific Gravity	ASTM D1298	0.87	0.87	0.89
Viscosity @40°C, cSt	ASTM D445	32	46	68
Viscosity @100°C, cSt	ASTM D445	6.3	8.7	11.2
Viscosity @-30°C, cSt	ASTM D445	3,500	3,628	3,174
Viscosity Index (VI)	ASTM D2270	>180	>180	>180
Pour Point °F (°C)	ASTM D97	-45 (-49)	-45 (-49)	-40 (-40)
Flash Point °F (°C)	ASTM D92	>590 (310)	>590 (310)	>570 (299)
FZG Load Stage	DIN 51354	12	12	12
Copper Corrosion	ASTM D4048	1A	1A	1A
Rust Test A & B	ASTM D665	Pass	Pass	Pass
Demulsibility 15 minutes	ASTM D1401	40-40-0	40-40-0	40-40-0
Dielectric Breakdown Voltage kV	ASTM D877	>55	>55	>55
Readily Biodegradable (meaning>60%)		Pass	Pass	Pass
OECD 301B % in 28 day	OECD 301B	>80	>80	>80
Minimally Toxic		Pass	Pass	Pass
Algae (EC 50), 72 hr, mg/L	OECD 201	>13,000 mg/L	>13,000 mg/L	>13,000 mg/L
Daphnia (EC 50), 48 hr, mg/L	OECD 202	>25,000 mg/L	>25,000 mg/L	>25,000 mg/L
Fish (LC 50), 96 hr, mg/L	OECD 203	>50,000 mg/L	>50,000 mg/L	>50,000 mg/L
Not Bioaccumulative (Calculated value as per EPA standard)		Pass	Pass	Pass
Bio-based Content %	ASTM D6866	>95	>95	>98

## Key Attributes / Approvals ▶



Any industry (construction, refuse, mining, dredging, marine, agriculture, oil & gas, plant operations, etc.) utilizing mobile or stationary hydraulically powered equipment, especially hydraulic systems where a release into the environment is possible or where a leak or spill could reach a waste stream.

- Classified as Environmentally Acceptable Lubricants (EAL's) as per the EPA's guidance document that defines standards for Environmentally Acceptable Lubricants (EPA 800-R-11-002) and as required by EPA's 2013 U.S. Vessel General Permit (VGP)
- Meets Parker Denison HF-1, HF-2, HF-6 (Dry ASTM D4310)
- Meets Eaton Brochure 03-401-2010 (Dry ASTM D943)
- Meets ISO 15380 HEES (Dry ISO 4263-3)
- Meets DIN 51524 Part 1, 2 & 3 (Dry ISO 4263-1)

See the Safety Data Sheet (SDS) for emergency, proper handling and disposal information.

Rev. BFSynAW-02032021