

# BIO-VYBE Loss Lubricant Base Fluids

BIO-VYBE is a series of renewable high viscosity base fluids based on natural and modified triglycerides. Applications include process oils, wood treatment, chain oils, rock drilling oils, lubricity improvement, viscosity & tackifying booster, and as bright stock alternative.

Parameter		Method	BIO-VYBE 46	BIO-VYBE 68	BIO-VYBE 100	BIO-VYBE 150	BIO-VYBE 220	BIO-VYBE 320
Kinematic Viscosity <sup>1</sup>	40°C (mm <sup>2</sup> /s)	EN ISO 3104	46	68	100	150	220	320
	100°C (mm <sup>2</sup> /s)	EN ISO 3104	11	14	19	28	38	51
Viscosity Index		ASTM D2270	241	215	212	226	225	224
Density 15°C (kg/m <sup>3</sup> )		ASTM D4052	916	917	920	929	932	935
Pour Point (°C)		ASTM D5950	-37	-37	-37	-35	-30	-22
Flashpoint (°C)		ASTM D93	>180	>180	>180	>250	>250	>250
Color		ASTM D1500	<1	<1	<1	<1.5	<1.5	<1.5
Acid Number (mg KOH/g)		ASTM D974	1	1	1.5	2.2	2.8	3.5
Biobased Carbon (%) <sup>2</sup>		ASTM D6866	≥98	≥98	≥98	≥98	≥98	≥98
Iodine number		ASTM D1959	<100	<100	<100	<70	<70	<70
LuSC-listed			Yes	Yes	Yes	Yes	Yes	Yes
NSF HX-1 food-grade approval						Yes	Yes	Yes
GWP (cradle to gate) <sup>3</sup>		kg CO <sub>2-eq</sub> /kg	2.35	2.31	2.24	2.17	2.11	2.05
Uptake <sup>4</sup>			-4.77	-4.78	-4.78	-4.85	-4.86	-4.86

Table represents typical values

## Environment & Safety

The BIO-VYBE series is REACH-compliant and LuSC-listed (EU Ecolabel compliant).

The products are readily biodegradable according to OECD 301B with a biodegradability >90% within 28 days.

<sup>1</sup> Viscosity may vary +/-10% (due to natural materials)

<sup>2</sup> Test method max total error ±3 %.

<sup>3</sup> From third party verified Cradle to Gate LCA (ISO 14040/14044) in accordance with API TR 1533 and UEIL PCF-calculation recommendation.

<sup>4</sup> Carbon sequestered during plant growth

## Product Composition & Manufacturing

Unique triglyceride derived materials.  
Miscible with most base fluids.

Developed and manufactured by  
Biobase Sweden AB.

Bio-based products according to EN  
16575:2014.

Shelf life 2 years from delivery.

