



# BIO-BASE High Solvency Industrial Base Fluids

**BIO-BASE** is a unique series of non-conventional base fluids with hydrocarbon characteristics similar to naphthenics (high solvency) but combined with very high VI, high biodegradability, and high response to antioxidants.<sup>1</sup>

Parameter		Method	BIO-BASE 4	BIO-BASE 10	BIO-BASE 15	BIO-BASE 22
Kinematic Viscosity	40°C (mm <sup>2</sup> /s)	EN ISO 3104	3.9	10	15	21
	100°C (mm <sup>2</sup> /s)	EN ISO 3104	1.5	3.2	4.4	5.7
Viscosity Index		ASTM D2270	157	207	235	240
Density 15°C (kg/m <sup>3</sup> )		ASTM D4052	804	813	820	830
Pour Point (°C)		ASTM D5950	-28	-38	-37	-36
Flashpoint (°C)		ASTM D93	150	145	145	145
Aniline Point (°C)		ASTM D611	85	88	84	78
Color		ASTM D1500	<1.5	<0.5	<0.5	<0.5
Total Acid Number (mg KOH/g)		ASTM D974	<0.1	<0.3	<0.3	<0.3
Biobased Carbon (%) <sup>2</sup>		ASTM D6866	≥98	≥98	≥98	≥98
Readily Biodegradable		OECD 301B	Yes	Yes	Yes	Yes
GWP (cradle to gate) <sup>3</sup> Uptake <sup>4</sup>		kg CO <sub>2</sub> -eq/kg	1.05 -3.66	1.34 -3.16	1.50 -3.07	1.63 -2.99

Table represents typical values

## Environment & Safety

**BIO-BASE 22** is unlabeled and with a biodegradability of 70% within 28 days according to OECD 301B.

**BIO-BASE 4, 10 & 15** carries hazard statement H304 (see MSDS), with a biodegradability of 88% within 28 days according to OECD 301B.

<sup>1</sup>Oxidation stability similar to Group II-base oils with standard phenolic/aminic inhibitors.

<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

Made from processed and hydrotreated non-edible vegetable oils. Miscible with most types of base oil.

Developed and manufactured by Biobase Sweden AB. Bio-based products according to EN 16575:2014.

Shelf life 2 years from delivery. Products may get hazy or when stored or transported cold. Allow product to reach room temperature and agitate to remedy.

