

{fuel properties}

BIODIESEL

▶▶ Fuel Properties	Biodiesel
Fuel Standard	ASTM 6751-02
Fuel composition	C12-C22 FAME
Lower Heating Value, Btu/gal	117,093
Kinetic Viscosity, @40 deg C.	1.9-6.0
Specific Gravity kg/1@ 60 deg F.	0.88
Density, lb/gal @15 deg C.	7.0328
Water ppm by wt.	.05% max
Carbon, wt %	77
Hydrgen, wt%	12
Oxygen, by dif wt. %	11
Sulfur, wt %	0.0-0.0024
Boiling point, deg C.	182-338
Flash Point, deg C.	100-170
Cloud Point deg C.	-3 to 12
Pour Point deg C.	-15 to 10
Cetane Number	48- 65
Stoichiometric Air/Fuel Ratio	13.8
BOCLE scuff, Grams wt	>7,000
HFRR, Microns	314



{material compatibility}

▶▶ Material	BXX	Effect compared to diesel fuel
Teflon	B100	Little Change
Nylon 6/6	B100	Little Change
Nitrile	B100	Hardness reduced 20%
Vitron A401-C	B100	Swell increased 18%
Vitron GFLT	B100	Little Change
Fluorosilicon	B100	Little Change
	B100	Swell increased 7%
Polyurethane	B100	Little Change in hardness
	B100	Swell increased 6%
Polypropylene	B100	Hardness reduced 10%
	B100	Swell increased 8-15%
Polyvinyl	B100	Much Worse
	B50	Worse
	B40	Worse
	B30	Worse
	B20	Comparable
Tygon	B10	Comparable
	B100	Worse

