Chart 1

Property Comparison	Octone	Cold Weather Starting	Fuel Mileage Compared to Gasoline	Stoichiometric A/F Ratio	Power Potential Compared to Gas	Heating Value BTU/lb	Gallon Equivalency
Gasoline (87 Octane)	87	Good	100%	14.7:1	Normal	18,000-19,000	1.0
Methanol	100	Poor	55%	6.45:1	4% Increase	8,570	1.8
E85 Fuel		Fair to Good	72%	9.8:1	3% to 5% Increase	12,500	1.4

Chart by Glen Beanard

Chart 2

Duty Cycle Frequency from Flex Fuel Sensor

 51hz
 0% Alcohol

 67hz
 25% Alcohol

 89hz
 50% Alcohol

 115hz
 85% Alcohol

 Il frequencies shown are leal readings. Actual readings. Actual readings.
 Percentage of alcohol in fuel

All frequencies shown are ideal readings. Actual readings may vary + or - 10hz and still be acceptable.

25.
23
21
19. Add 20 ml
17. of fuel from the vehicle to the graduated cylinder
11. 11. 8
7. 5

Add 23
enough 21
water to bring the total 21
volume in the cylinder to 24 ml 25

27
5

Seal and shake the cylinder lightly to mix the fuel and water. Let it stand for three minutes and then record the number on the cylinder where the gasoline and water/alcohol meet (green).

Calculate the alcohol percentage by subtracting 4 from the number on the cylinder then multiplying that by 5. The answer is the alcohol percentage. In this example, the water and gas meet at 12 ml. So 12 minus 4 times 5 equals 40. The calculated amount is 40% alcohol in fuel or E40.

Illustration by Glen Beanard

Chart 3