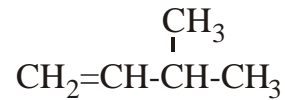
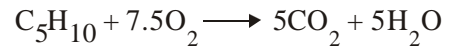


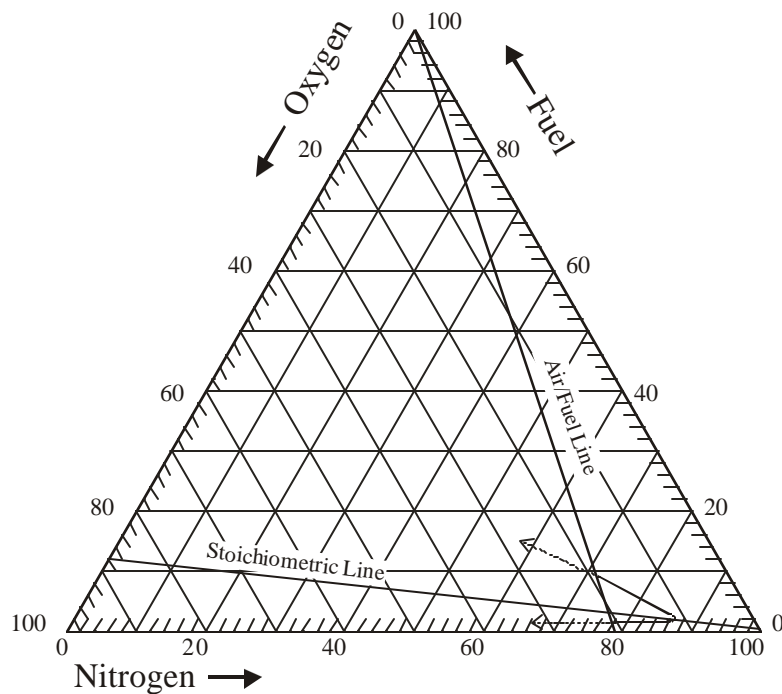
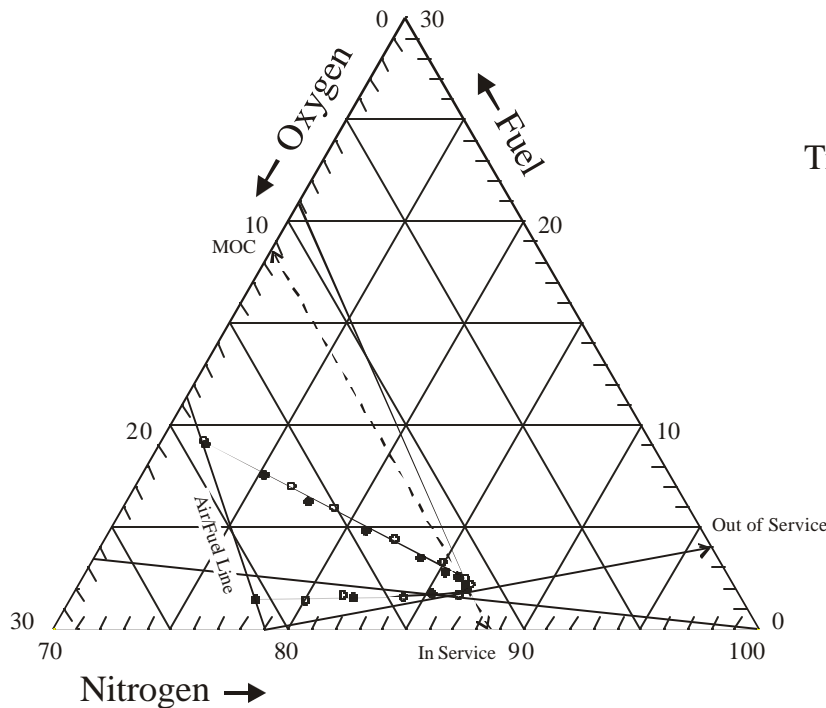
# 3-Methyl-1-Butene



26°C and Atmospheric Pressure



Triangular Plot Data From Reference 2



Molecular weight:	70.14
Boiling point: <sup>1</sup>	20.15°C
LFL: <sup>2</sup>	1.5%
UFL: <sup>2</sup>	9.1%
MOC:	11.5% O <sub>2</sub>
Flash point: <sup>3</sup>	-56.67°C

Vapor Pressure

Equation:<sup>4</sup>  $\ln P = A - \frac{B}{T(K) + C}$

P (mmHg)  
210 to 315K  
A = 15.7179  
B = 2333.61  
C = -36.33

Concentration of vapor in air at 1 atm.: \*\*%

From Figure:

In service Concentrations:	88.5% N <sub>2</sub> 11.5% O <sub>2</sub>
Out of service Concentrations:	4% Fuel 96% N <sub>2</sub>

<sup>1</sup> Lide, D. R., Editor in chief, *Handbook of Chemistry and Physics*, 71<sup>st</sup> ed., CRC Press, Inc., Boston, 1991

<sup>2</sup> Zabetakis, M. G., *Flammability Characteristics of Combustible Gases and Vapors*, U.S. Dept. of the Interior, Bureau of Mines, No. 627, 1965

<sup>3</sup> Stephenson, R. M., *Flash Points of Organic and Organometallic Compounds*, Elsevier Science Publishing Co., Inc., New York, 1987

<sup>4</sup> Reid, R. C., Prausnitz, J. M., and Sherwood, T. R., *The Properties of Gases and Liquids*, 3<sup>rd</sup> ed. McGraw Hill, New York, 1977