Lower Explosive Limits of Combustible Gases

The following are the lower explosive limits (LEL) of selected gases:

Acetone	2.5% vol	Hexane	1.1% vol
Acetylene	2.5% vol	Hydrogen	4.0% vol
Ammonia	15.0% vol	Isopropyl Alcohol (Isopropanol)	2.0% vol
Benzene	1.2% vol	Methane	5.0% vol
Butane	1.9% vol	Methyl Alcohol (Methanol)	6.0% vol
Butyl Alcohol (Butanol)	1.4% vol	Methyl Ethyl Ketone	1.4% vol
Carbon Monoxide	12.5% vol	n-Pentane	1.4% vol
Diethyl Ether	1.9% vol	Propane	2.1% vol
Ethane	3.0% vol	Propylene	2.0% vol
Ethyl Alcohol (Ethanol)	3.3% vol	Styrene	0.9% vol
Ethylene	2.7% vol	Toluene	1.1% vol
Ethylene Oxide	2.7% vol	Xylene	1.1% vol

$$\%\ \text{LEL} = \frac{\text{Gas Concentration (in \% vol)}}{\text{Lower Explosive Limit (in \% vol)}} \times 100$$

$$25\%\ \text{LEL Pentane} = \frac{.35\%\ \text{vol}}{1.4\%\ \text{vol}} \times 100$$

Example of Combustion