



EXAMPLES OF LOWER AND UPPER EXPLOSION LIMITS OF SOME GASES AND VAPOURS FROM SOLVENTS

Topic:
Handling of
chemicals

Date:
02/09/2009

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Name		LEL (% by	UEL (% by
Examples of some gases	Acetylene	2.3	82
	Hydrogen	4	75
	Hydrogen sulfide	4	46
	Carbon monoxide	12.5	74.2
	Methane	4.5	15
	Propane	2.1	9.5
Examples of vapours from some solvents	Acetaldehyde	4	60
	Acetone	2.6	12.8
	Benzene	1.3	7.1
	Cyclohexane	1.3	8
	n-Heptane	1	6.7
	n-Hexane	1.1	7.5
	Carbon disulfide	1.3	50
	Methyl ethyl ketone	1.8	10
	Styrene	1.1	6.1
	Toluene	1.2	7.1
	p-Xylene	1.1	7
	Diethyl ether	1.9	
	Acetic acid	5.4	
	Ethyl acetate	2.2	
Petroleum ether	1.4		

The LEL and UEL values are normally expressed at atmospheric pressure and temperature. As temperature increases, the LEL value will fall while the UEL value will rise, thus extending the range in which there is a risk of explosion at both ends. The same will generally apply with increasing pressure.