



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

Topic:  
Handling of  
chemicals

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	Name	LEL (% by vol.)	UEL (% by vol.)
Example of some gasses	Acetylene	2,5	100
	Carbon monoxide	12	75
	Hydrogen	4	75
	Hydrogen sulfide	4,3	46
	Methane	4,4	17
	Propane	2,1	10,1
Example of vapours from some solvents	Acetaldehyde	4,0	57
	Acetic acid	4	19,9
	Acetone	2,6	13
	Benzene	1,2	7,8
	Carbon disulfide	1,0	50
	Cyclohexane	1,3	8
	Diethyl ether	1,9	48
	Ethyl acetate	2	12
	Methyl ethyl ketone	1,8	10
	n-Heptane	1,05	6,7
	n-Hexane	1,1	7,5
	p-Xylene	1,0	6,0
	Petroleum ether	1,1	5,9
	Styrene	1,1	6,1
Toluene	1,2	7,1	

LEL: lower explosive limit; UEL: Upper explosive limit.

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.