

Lower and Upper Explosive Limits for Flammable Gases and Vapors (LEL/UEL)

Before a fire or explosion can occur, three conditions must be met simultaneously. A fuel (ie. combustible gas) and oxygen (air) must exist in certain proportions, along with an ignition source, such as a spark or flame. The ratio of fuel and oxygen that is required varies with each combustible gas or vapor.

The minimum concentration of a particular combustible gas or vapor necessary to support its combustion in air is defined as the Lower Explosive Limit (LEL) for that gas. Below this level, the mixture is too "lean" to burn. The maximum concentration of a gas or vapor that will burn in air is defined as the Upper Explosive Limit (UEL). Above this level, the mixture is too "rich" to burn. The range between the LEL and UEL is known as the flammable range for that gas or vapor. The values shown in this table are valid only for the conditions under which they were determined (usually room temperature and atmospheric pressure using a 2 inch tube with spark ignition). The flammability range of most materials expands as temperature, pressure and container diameter increase.

Sources: Data extracted from Gas Data Book, 7th edition, copyright 2001 by Matheson Gas Products, and from Bulletin 627, Flammability Characteristics of Combustible Gases and Vapors, copyright 1965 by U.S.Department of the Interior, Bureau of Mines.

All concentrations in percent by volume.

Gas	LEL	UEL
Acetone	2.6	13.0
Acetylene	2.5	100.0
Acrylonitrile	3.0	_
Allene	1.5	11.5
Ammonia	15.0	28.0
Benzene	1.3	7.9
1.3-Butadiene	2.0	12.0
Butane	1.8	8.4
n-Butanol	1.7	12.0
1-Butene	1.6	10.0
Cis-2-Butene	1.7	9.7
Trans-2-Butene	1.7	9.7
Butyl Acetate	1.4	8.0
Carbon Monoxide	12.5	74.0
Carbonyl Sulfide	12.0	29.0
Chlorotrifluoroethylene	8.4	38.7
Cumene	0.9	6.5
Cyanogen	6.6	32.0
Cyclohexane	1.3	7.8
Cyclopropane	2.4	10.4
Deuterium	4.9	75.0
Diborane	0.8	88.0
Dichlorosilane	4.1	98.8
Diethylbenzene	0.8	-
1,1-Difluoro-1-Chloroethane	9.0	14.8
1,1-Difluoroethane	5.1	17.1
1,1-Difluoroethylene	5.5	21.3
Dimethylamine	2.8	14.4
Dimethyl Ether	3.4	27.0
2,2-Dimethylpropane	1.4	7.5
Ethane	3.0	12.4
Ethanol	3.3	19.0
Ethyl Acetate	2.2	11.0
Ethyl Benzene	1.0	6.7
Ethyl Chloride	3.8	15.4
Ethylene	2.7	36.0
Ethylene Oxide	3.6	100.0
Gasoline	1.2	7.1

Heptane 1.1 6.7 Hexane 1.2 7.4 Hydrogen 4.0 75.0 Hydrogen Cyanide 5.6 40.0 Hydrogen Sulfide 4.0 44.0 Isobutane 1.8 8.4 Isobutane 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Wercaptan 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Picoline </th <th>Gas</th> <th>LEL</th> <th>UEL</th>	Gas	LEL	UEL
Hydrogen 4.0 75.0 Hydrogen Cyanide 5.6 40.0 Hydrogen Sulfide 4.0 44.0 Isobutane 1.8 8.4 Isobutylene 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Cellosolve 2.5 20.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Unyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 1.0<	Heptane	1.1	6.7
Hydrogen Cyanide 5.6 40.0 Hydrogen Sulfide 4.0 44.0 Isobutane 1.8 8.4 Isobutylene 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pertane 1.4 7.8 Picoline 1.4 7.8 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 1.0 - <	Hexane	1.2	7.4
Hydrogen Sulfide 4.0 44.0 Isobutane 1.8 8.4 Isobutylene 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Wircaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrafluoroethylene 1.2 7.1 Trichloroethylene 1.2.0 40.0 Turp	Hydrogen	4.0	75.0
Isobutane 1.8 8.4 Isobutylene 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Lthyl Ketone 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Warcaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toiluene 1.2 7.1 Trichloroethylene 1.2.	Hydrogen Cyanide	5.6	40.0
Isobutylene 1.8 9.6 Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Lthyl Ketone 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Winyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Trinchloroethylene 1.2 7.1 <tr< td=""><td>Hydrogen Sulfide</td><td>4.0</td><td>44.0</td></tr<>	Hydrogen Sulfide	4.0	44.0
Isopropanol 2.2 - Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Mononethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Picoline 1.4 - Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toilene 12.0 40.0 Trinethylamine 2.6 -	Isobutane	1.8	8.4
Methane 5.0 15.0 Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Propylene 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - <t< td=""><td>Isobutylene</td><td>1.8</td><td>9.6</td></t<>	Isobutylene	1.8	9.6
Methanol 6.7 36.0 Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Picoline 1.4 - Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Sromide	Isopropanol	2.2	-
Methylacetylene 1.7 11.7 Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Chloride <td>Methane</td> <td>5.0</td> <td>15.0</td>	Methane	5.0	15.0
Methyl Bromide 10.0 15.0 3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Picoline 1.4 - Propylene 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Timethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate	Methanol	6.7	36.0
3-Methyl-1-Butene 1.5 9.1 Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Timethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride	Methylacetylene	1.7	11.7
Methyl Cellosolve 2.5 20.0 Methyl Chloride 7.0 17.4 Methyl Chloride 1.9 10.0 Methyl Ethyl Ketone 1.9 10.0 Methyl Mercaptan 3.9 21.8 Methyl Winyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trinethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 -	Methyl Bromide	10.0	15.0
Methyl Chloride 7.0 17.4 Methyl Ethyl Ketone 1.9 10.0 Methyl Wercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tichloroethylene 1.2 7.1 Trichloroethylene 1.2 7.1 Trichloroethylene 1.2.0 40.0 Timethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0	3-Methyl-1-Butene	1.5	9.1
Methyl Ethyl Ketone 1.9 10.0 Methyl Mercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0	Methyl Cellosolve	2.5	20.0
Methyl Mercaptan 3.9 21.8 Methyl Vinyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7	Methyl Chloride	7.0	17.4
Methyl Vinyl Ether 2.6 39.0 Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7	Methyl Ethyl Ketone	1.9	10.0
Monoethylamine 3.5 14.0 Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0	Methyl Mercaptan	3.9	21.8
Monomethylamine 4.9 20.7 Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0	Methyl Vinyl Ether	2.6	39.0
Nickel Carbonyl 2.0 - Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0	Monoethylamine	3.5	14.0
Pentane 1.4 7.8 Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7		4.9	20.7
Picoline 1.4 - Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7	Nickel Carbonyl	2.0	-
Propane 2.1 9.5 Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7	Pentane	1.4	7.8
Propylene 2.4 11.0 Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Fluoride 2.6 21.7	Picoline	1.4	-
Propylene Oxide 2.8 37.0 Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Fluoride 2.6 21.7	Propane	2.1	9.5
Styrene 1.1 - Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Fluoride 2.6 21.7	Propylene	2.4	11.0
Tetrafluoroethylene 4.0 43.0 Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Fluoride 2.6 21.7	Propylene Oxide	2.8	37.0
Tetrahydrofuran 2.0 - Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 2.6 21.7	Styrene	1.1	-
Toluene 1.2 7.1 Trichloroethylene 12.0 40.0 Trimethylamine 2.0 12.0 Turpentine 0.7 - Vinyl Acetate 2.6 - Vinyl Bromide 9.0 14.0 Vinyl Chloride 4.0 22.0 Vinyl Fluoride 2.6 21.7	Tetrafluoroethylene	4.0	43.0
Trichloroethylene12.040.0Trimethylamine2.012.0Turpentine0.7-Vinyl Acetate2.6-Vinyl Bromide9.014.0Vinyl Chloride4.022.0Vinyl Fluoride2.621.7		2.0	-
Trimethylamine2.012.0Turpentine0.7-Vinyl Acetate2.6-Vinyl Bromide9.014.0Vinyl Chloride4.022.0Vinyl Fluoride2.621.7	Toluene	1.2	7.1
Turpentine0.7-Vinyl Acetate2.6-Vinyl Bromide9.014.0Vinyl Chloride4.022.0Vinyl Fluoride2.621.7	Trichloroethylene	12.0	40.0
Vinyl Acetate2.6Vinyl Bromide9.0Vinyl Chloride4.0Vinyl Fluoride2.621.7	Trimethylamine	2.0	12.0
Vinyl Bromide9.014.0Vinyl Chloride4.022.0Vinyl Fluoride2.621.7	Turpentine	0.7	-
Vinyl Chloride4.022.0Vinyl Fluoride2.621.7	Vinyl Acetate	2.6	-
Vinyl Fluoride 2.6 21.7		9.0	14.0
		4.0	22.0
	Vinyl Fluoride	2.6	21.7
Ayiene 1.1 0.0	Xylene	1.1	6.6