Pellistor Correction Factors for Fixed Detectors

ISO10156 LELs are those used to date and now applicable to UL and CSA calibrated sensors. EN61779 LELs are the newer values which apply from 3rd March 2008 to all ATEX and IECEx calibrated sensors.

To obtain an estimate of the true concentration of a species from the detector reading, multiply the actual reading by the applicable correction factor from the table below.

	ISO10156 Correction Factors			EN61779 Correction Factors		
		Detector Calibration			Detector Calibration	
Gas or Vapour	LEL	Pentane	Methane	LEL	Pentane	Methane
Acetaldehyde	4.1	0.8	1.6	4.0	0.8	1.4
Acetic Acid	5.4	0.8	1.6	4.0	1.0	1.9
Acetic Anhydride	2.9	1.0	2.0	2.0	1.4	2.6
Acetone	2.6	0.9	1.6	2.5	0.9	1.5
Acetylene	2.5	0.8	1.7	2.3	0.8	1.6
Acrylonitrile	2.8	1.0	2.0	2.8	0.9	1.8
Allyl Alcohol	2.5	0.9	1.9	2.5	0.8	1.7
Ammonia	15.0	0.4	0.6	15.0	0.3	0.5
N-Amyl Alcohol	1.2	1.4	2.8	1.2	1.3	2.5
Aniline	1.3	1.2	2.5	1.2	1.2	2.4
Benzene	1.3	1.1	1.9	1.2	1.1	1.8
1.3 Butadiene	2.0	0.8	1.3	1.4	1.1	1.6
N-Butane	1.9	0.8	1.6	1.4	1.0	1.9
Iso-Butane	1.8	0.9	1.8	1.3	1.2	2.2
Butene-1	1.6	1.0	2.0	1.6	0.9	1.8
N-Butanol	1.4	1.4	2.9	1.7	1.1	2.1
I-Butanol	1.7	0.9	1.9	1.6	0.9	1.8
Tert-Butanol	2.4	0.6	1.3	2.4	0.6	1.1
Butyl Acetate	0.8	1.5	3.0	1.3	0.9	1.6
N-Butyl Benzene	0.8	1.4	3.0	0.8	1.3	2.6
Iso-Butyl Benzene	0.8	1.4	3.0	0.8	1.3	2.6
Carbon Monoxide	11.0	0.6	1.2	10.9	0.6	1.1
Carbon Disulphide	1.3	4.0	8.0	0.6	8.1	15.3
Carbon Oxysulphide	12.0	0.5	1.0	6.5	0.9	1.6
Cyclohexane	1.3	0.9	2.0	1.2	0.9	1.9
Cyclopropane	2.4	0.8	1.6	2.4	0.7	1.4
N-Decane	0.8	1.4	2.8	0.7	1.5	2.8
Diethylamine	1.8	0.9	1.8	1.7	0.9	1.7
Dimethylamine	2.8	0.8	1.6	2.8	0.7	1.4
2.3 Dimethyl pentane	1.1	1.1	2.2	1.0	1.1	2.1
2.2 Dimethyl propane	1.4	1.1	2.2	1.4	1.0	1.9
Dimethyl Sulphide	2.2	1.1	2.2	2.2	1.0	1.9
Dioxane	2.0	1.0	2.0	1.9	1.0	1.9
Ethane	3.0	0.7	1.4	2.5	0.8	1.5
Ethyl Acetate	2.5	0.9	1.8	2.2	1.0	1.8

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Ethanol	4.3	0.6	1.9	3.1	0.8	2.3
Ethyl Benzene	1.0	1.3	2.6	1.0	1.2	2.3
Ethyl Bromide	6.7	0.5	1.0	6.8	0.5	0.9
Ethyl Chloride	3.8	0.8	1.6	3.6	0.8	1.5
Ethyl Cyclopentane	1.1	1.1	2.2	1.1	1.0	1.9
Ethyl Ether	1.9	1.0	2.1	1.7	1.0	2.1
Ethylene	3.1	0.7	1.2	2.3	0.9	1.4
Ethylene Dichloride	6.2	0.7	1.4	6.2	0.7	1.2
Ethylene Oxide	3.0	0.9	1.8	2.6	1.0	1.8
N-Heptane	1.2	1.3	2.3	1.1	1.3	2.2
N-Hexane	1.1	1.3	2.0	1.0	1.3	1.9
Hydrogen	4.0	0.6	1.2	4.0	0.6	1.1
Kerosene	0.7	1.4	2.8	0.7	1.3	2.5
LPG		1.1	2.1		N/A	N/A
Methane	5.0	0.5	1.0	4.4	0.5	1.0
Methanol	7.3	0.5	1.2	5.5	0.6	1.4
Methyl Chloride	10.7	4.0	8.0	7.6	5.3	9.9
Methyl Cyclohexane	1.2	1.0	2.0	1.2	1.0	1.8
Methylene Dichloride	15.5	0.5	1.0	9.7	0.7	1.4
Dimethyl Ether	3.4	0.7	1.4	2.7	0.8	1.6
Methyl Ethyl Ether	2.0	1.0	2.0	2.0	0.9	1.8
Methyl Ethyl Ketone	1.8	1.1	2.2	1.4	1.3	2.5
Methyl-N-Propyl-Ketone	1.5	1.6	3.2	1.5	1.5	2.8
Naphthalene	0.9	1.3	2.8	0.9	1.2	2.5
N-Nonane	0.8	1.4	2.8	0.7	1.5	2.8
N-Octane	1.0	1.3	2.6	0.8	1.5	2.9
N-Pentane	1.5	1.0	1.9	1.4	1.0	1.8
Iso-Pentane	1.5	1.0	1.9	1.4	1.0	1.8
Petrol		1.0	1.9	1.2	N/A	N/A
Propane	2.2	0.7	1.3	1.7	0.8	1.5
N-Propanol	2.1	1.0	2.0	2.2	0.9	1.7
I-Propanol		0.9	1.8	2.0	0.0	0.0
Propylene	2.0	0.9	1.8	2.0	0.8	1.6
Propylene Oxide	2.1	1.0	2.0	2.3	0.9	1.6
Iso-Propyl Ether	1.4	1.0	2.0	1.1	1.2	2.2
Propyne	1.7	1.1	2.2	1.7	1.0	1.9
Styrene Monomer	1.1	4.0	8.0	1.1	3.7	7.0
Tetra Hydra Furan	2.0	1.0	2.1	1.5	1.2	2.5
Toluene	1.2	1.1	1.9	1.1	1.1	1.8
Trimethylbenzene	0.9	1.5	3.0	1.0	1.3	2.5
White Spirit		1.5	3.0		N/A	N/A
o-Xylene	1.0	1.2	2.8	1.0	1.1	2.5
m-Xylene	1.1	1.1	2.2	1.0	1.1	2.1
p-Xylene	1.1	1.1	2.2	1.0	1.1	2.1