



Threshold Limit Values (TLV) Immediately Dangerous to Life and Health (IDLH)

Matheson Tri-Gas assumes no responsibility for the accuracy of the information listed. As TLV and IDLH values change frequently, the current regulations from the following sources should be consulted for up-to-date accuracy.

Sources: *TLV-TWA and TLV-STEL data extracted from 2001 Threshold Limit Values and Biological Exposure Indices, copyright 2001 by the American Conference of Governmental Industrial Hygienists.*

Notes: All concentrations in parts per million. "C" indicates Ceiling Limit.

Substance	TLV TWA	TLV STEL
Acetaldehyde	25C	—
Acetic Acid	10	15
Acetone	500	750
Acetonitrile	40	60
Acrolein	0.1C	—
Acrylonitrile	2	—
Ammonia	25	35
Arsine	0.05	—
Benzene	0.5	2.5
Boron Trifluoride	1C	—
Bromine	0.1	0.2
1,3-Butadiene	2	—
Butane	800	—
n-Butyl Acetate	150	200
n-Butyl Acrylate	2	—
n-Butyl Alcohol	50C	—
Butyl Mercaptan	0.5	—
Carbon Dioxide	5,000	30000
Carbon Disulfide	10	—
Carbon Monoxide	25	—
Carbon Tetrachloride	5	10
Chlorine	0.5	1
Chlorine Dioxide	0.1	0.3
Chlorobenzene	10	—
Chloroform	10	—
Chloropicrin	0.1	—
Cresol	5	—
Cyanogen	10	—
Cyanogen Chloride	0.3C	—
Cyclohexane	300	—
Cyclohexanol	50	—
Cyclohexanone	25	—
Diborane	0.1	—
Dichlorobenzene	10	—
1,1-Dichloroethane	100	—
Dimethylamine	5	15
Dioxane	20	—
Ethanolamine	3	6
Ethyl Acetate	400	—
Ethyl Acrylate	5	15
Ethyl Alcohol	1000	—
Ethylamine	5	15
Ethyl Benzene	100	125
Ethyl Chloride	100	—
Ethylene Dichloride	10	—
Ethylene Glycol	100 mg/m ³ C	—
Ethylene Oxide	1	—
Ethyl Ether	400	500
Ethyl Mercaptan	0.5	—

Substance	TLV TWA	TLV STEL
Fluorine	1	2
Formaldehyde	0.3C	—
Formic Acid	5	10
Furfural	2	—
Gasoline	300	500
Germane	0.2	—
Glutaraldehyde	0.05C	—
Heptane	400	500
Hexane	50	—
Hydrazine	0.01	—
Hydrogen Bromide	3C	—
Hydrogen Chloride	5C	—
Hydrogen Cyanide	4.7C	—
Hydrogen Fluoride	3C	—
Hydrogen Peroxide	1	—
Hydrogen Selenide	0.05	—
Hydrogen Sulfide	10	15
Iodine	0.1C	—
Isopropyl Alcohol	400	500
Methyl Alcohol	200	250
Methylamine	5	15
Methyl Bromide	1	—
Methyl Chloride	50	100
Methylene Chloride	50	—
Methyl Ethyl Ketone	200	300
Methyl Mercaptan	0.5	—
Methyl Methacrylate	50	100
Naphthalene	10	15
Nitric Acid	2	4
Nitric Oxide	25	—
Nitrobenzene	1	—
Nitrogen Dioxide	3	5
Nitrogen Trifluoride	10	—
Nitrous Oxide	50	—
Octane	300	—
Ozone	0.05	—
Pentane	600	750
Perchloroethylene	25	100
Phenol	5	—
Phosgene	0.1	—
Phosphine	0.3	1
Pyridine	5	—
Silane	5	—
Styrene	20	40
Sulfur Dioxide	2	5
Sulfur Hexafluoride	1000	—
Toluene	50	—
Toluene Diisocyanate	0.005	0.02
1,2,4-Trichlorobenzene	5C	—
1,1,2-Trichloroethane	10	—
Trichloroethylene	50	100
Triethylamine	1	3
Trimethylamine	5	15
Trimethylbenzene	25	—
Turpentine	100	—
Vinyl Acetate	10	15
Vinyl Bromide	0.5	—
Vinyl Chloride	1	—
Xylenes	100	150