

## TO-15 Compound List MDL/PQL in ppbV

TO-15 Compound List	MDL (ppbv)	PQL (ppbv)	TO-15 Low Level	MDL (ppbv)	PQL (ppbv)
1,1 - Dichloroethene	0.2	0.5	1,1 - Dichloroethene	0.0611	0.1
1,1,1,2-Tetrachloroethane	0.1	0.5	1,1,1,2-Tetrachloroethane	0.067	0.1
1,1,1-Trichloroethane	0.15	0.5	1,1,1-Trichloroethane	0.068	0.1
1,1,2,2-Tetrachloroethane	0.15	0.5	1,1,2,2-Tetrachloroethane	0.0529	0.1
1,1,2-Trichloroethane	0.19	0.5	1,1,2-Trichloroethane	0.0662	0.1
1,1-Dichloroethane	0.17	0.5	1,1-Dichloroethane	0.0685	0.1
1,2,4-Trichlorobenzene	0.07	0.5	1,2,4-Trichlorobenzene	0.058	0.1
1,2,4-Trimethylbenzene	0.18	0.5	1,2,4-Trimethylbenzene	0.0763	0.1
1,2-Dibromoethane(Ethyl dibromide)	0.14	0.5	1,2-Dibromoethane(Ethyl dibromide)	0.067	0.1
1,2-Dichlorobenzene	0.1	0.5	1,2-Dichlorobenzene	0.0685	0.1
1,2-Dichloroethane	0.16	0.5	1,2-Dichloroethane	0.068	0.1
1,2-Dichloropropane	0.22	0.5	1,2-Dichloropropane	0.1253	0.15
1,2-dichlorotetrafluoromethane(F114)	0.15	0.5	1,2-dichlorotetrafluoromethane(F114)	0.103	0.1
1,3,5-Trimethylbenzene	0.14	0.5	1,3,5-Trimethylbenzene	0.0537	0.1
1,3-Butadiene	0.27	0.5	1,3-Butadiene	0.0656	0.1
1,3-Dichlorobenzene	0.06	0.5	1,3-Dichlorobenzene	0.0489	0.1
1,4-Dichlorobenzene	0.11	0.5	1,4-Dichlorobenzene	0.0489	0.1
1,4-Dioxane	0.14	0.5	1,4-Dioxane	0.0603	0.1
2-Butanone (MEK)	0.15	0.5	2-Butanone (MEK)	0.0449	0.1
2-Hexanone	0.21	0.5	2-Hexanone	0.0749	0.1
4-Ethyl Toluene	0.15	0.5	4-Ethyl Toluene	0.058	0.1
4-Methyl-2-Pentanone (MIBK)	0.16	0.5	4-Methyl-2-Pentanone (MIBK)	0.0456	0.1
Acetone	0.24	4	Acetone	0.0917	0.1
Benzene	0.28	0.5	Benzene	0.0489	0.1
Benzyl Chloride	0.12	0.5	Benzyl Chloride	0.058	0.1
Bromodichloromethane	0.13	0.5	Bromodichloromethane	0.0356	0.1
Bromoform	0.17	0.5	Bromoform	0.0493	0.1
Bromomethane	0.2	0.5	Bromomethane	0.0564	0.1
Carbon Disulfide	0.16	0.5	Carbon Disulfide	0.0427	0.1
Carbon Tetrachloride	0.15	0.5	Carbon Tetrachloride	0.0626	0.1
Chlorobenzene	0.092	0.5	Chlorobenzene	0.0638	0.1
Chloroethane	0.15	0.5	Chloroethane	0.1006	0.2
Chloroform	0.4	0.5	Chloroform	0.0905	0.1
Chloromethane	0.35	0.5	Chloromethane	0.1346	0.15
cis-1,2-dichloroethene	0.14	0.5	cis-1,2-dichloroethene	0.041	0.1
cis-1,3-Dichloropropene	0.08	0.5	cis-1,3-Dichloropropene	0.0526	0.1
Dibromochloromethane	0.11	0.5	Dibromochloromethane	0.0699	0.1
Dichlorodifluoromethane	0.15	0.5	Dichlorodifluoromethane	0.0667	0.1
Ethyl Acetate	0.118	0.5	Ethyl Acetate	0.0564	0.1
Ethyl Benzene	0.093	0.5	Ethyl Benzene	0.0356	0.1
Freon 113	0.12	0.5	Freon 113	0.0456	0.1
Hexachlorobutadiene	0.17	0.5	Hexachlorobutadiene	0.17	0.2
Hexane	0.51	1	Hexane	0.0529	0.1
Isopropanol	0.399	4	Isopropanol	0.0469	0.1
m,p-Xylene	0.12	0.5	m,p-Xylene	0.1144	0.2
Methylene Chloride	0.19	1	Methylene Chloride	0.0905	0.1
MTBE	0.14	0.5	MTBE	0.0373	0.1
Naphthalene	0.5	5	Naphthalene	0.0512	0.1
o-xylene	0.143	0.5	o-xylene	0.0319	0.1
Styrene	0.15	0.5	Styrene	0.0676	0.1
Tetrachloroethene	0.19	0.5	Tetrachloroethene	0.0596	0.1
Tetrahydrofuran	0.14	0.5	Tetrahydrofuran	0.0462	0.1
Toluene	0.14	0.5	Toluene	0.0299	0.1
trans-1,2-Dichloroethene	0.14	0.5	trans-1,2-Dichloroethene	0.0742	0.1
Trichloroethene	0.098	0.5	Trichloroethene	0.0456	0.1
Trichlorofluoromethane	0.14	0.5	Trichlorofluoromethane	0.0435	0.1
Vinyl Acetate	0.182	0.5	Vinyl Acetate	0.0942	0.1
Vinyl Chloride	0.097	0.5	Vinyl Chloride	0.0362	0.1

## TO-15 Compound List MDL/PQL in $\mu\text{g}/\text{m}^3$

TO-15 Compound List ( $\mu\text{g}/\text{m}^3$ )	MDL ( $\mu\text{g}/\text{m}^3$ )	PQL ( $\mu\text{g}/\text{m}^3$ )	TO-15 Compound List ( $\mu\text{g}/\text{m}^3$ )	MDL ( $\mu\text{g}/\text{m}^3$ )	PQL ( $\mu\text{g}/\text{m}^3$ )
1,1 - Dichloroethene	0.794	1.99	1,1 - Dichloroethene	0.24	0.4
1,1,1,2-Tetrachloroethane	0.687	3.44	1,1,1,2-Tetrachloroethane	0.46	0.69
1,1,1-Trichloroethane	0.819	2.73	1,1,1-Trichloroethane	0.37128	0.546
1,1,2,2-Tetrachloroethane	1.0305	3.44	1,1,2,2-Tetrachloroethane	0.36	0.69
1,1,2-Trichloroethane	1.0374	2.73	1,1,2-Trichloroethane	0.361452	0.546
1,1-Dichloroethane	0.6885	2.03	1,1-Dichloroethane	0.28	0.41
1,2,4-Trichlorobenzene	0.4984	3.56	1,2,4-Trichlorobenzene	0.41296	0.712
1,2,4-Trimethylbenzene	0.8856	2.46	1,2,4-Trimethylbenzene	0.375396	0.492
1,2-Dibromoethane(Ethyl dibromide)	1.0752	3.84	1,2-Dibromoethane(Ethyl dibromide)	0.51456	0.768
1,2-Dichlorobenzene	0.601	3.01	1,2-Dichlorobenzene	0.41	0.6
1,2-Dichloroethane	0.648	2.03	1,2-Dichloroethane	0.28	0.41
1,2-Dichloropropane	1.0164	2.31	1,2-Dichloropropane	0.578886	0.693
1,2-dichlorotetrafluoromethane(F114)	0.9375	3.13	1,2-dichlorotetrafluoromethane(F114)	0.71997	0.699
1,3,5-Trimethylbenzene	0.6888	2.46	1,3,5-Trimethylbenzene	0.264204	0.492
1,3-Butadiene	0.5967	1.11	1,3-Butadiene	0.14	0.22
1,3-Dichlorobenzene	0.3606	3.01	1,3-Dichlorobenzene	0.29	0.6
1,4-Dichlorobenzene	0.6611	3.01	1,4-Dichlorobenzene	0.29	0.6
1,4-Dioxane	0.504	1.8	1,4-Dioxane	0.22	0.36
2-Butanone (MEK)	0.4425	1.48	2-Butanone (MEK)	0.13	0.3
2-Hexanone	0.861	2.05	2-Hexanone	0.30709	0.41
4-Ethyl Toluene	0.738	2.46	4-Ethyl Toluene	0.28536	0.492
4-Methyl-2-Pentanone (MIBK)	0.656	2.05	4-Methyl-2-Pentanone (MIBK)	0.18696	0.41
Acetone	0.5712	9.52	Acetone	0.218246	0.238
Benzene	0.8932	1.6	Benzene	0.16	0.32
Benzyl Chloride	0.69	2.88	Benzyl Chloride	0.33	0.58
Bromodichloromethane	0.871	3.35	Bromodichloromethane	0.23852	0.67
Bromoform	1.7578	5.17	Bromoform	0.509762	1.034
Bromomethane	0.776	1.94	Bromomethane	0.218832	0.388
Carbon Disulfide	0.4976	1.56	Carbon Disulfide	0.13	0.31
Carbon Tetrachloride	0.9435	3.15	Carbon Tetrachloride	0.39	0.63
Chlorobenzene	0.4232	2.3	Chlorobenzene	0.29348	0.46
Chloroethane	0.396	1.32	Chloroethane	0.265584	0.528
Chloroform	1.952	2.44	Chloroform	0.44164	0.488
Chloromethane	0.7245	1.04	Chloromethane	0.28	0.31
cis-1,2-dichloroethene	0.5544	1.98	cis-1,2-dichloroethene	0.16236	0.396
cis-1,3-Dichloropropene	0.3632	2.27	cis-1,3-Dichloropropene	0.238804	0.454
Dibromochloromethane	0.9372	4.26	Dibromochloromethane	0.595548	0.852
Dichlorodifluoromethane	0.7425	2.48	Dichlorodifluoromethane	0.33	0.5
Ethyl Acetate	0.4248	1.8	Ethyl Acetate	0.20304	0.36
Ethyl Benzene	0.31062	1.67	Ethyl Benzene	0.118904	0.334
Freon 113	0.9192	3.83	Freon 113	0.349296	0.766
Hexachlorobutadiene	1.8139	5.34	Hexachlorobutadiene	1.81	2.13
Hexane	1.7952	3.52	Hexane	0.186208	0.352
Isopropanol	1.6359	16.4	Isopropanol	0.19229	0.41
m,p-Xylene	0.492	2.05	m,p-Xylene	0.46904	0.82
Methylene Chloride	0.6859	3.61	Methylene Chloride	0.326705	0.361
MTBE	0.5054	1.81	MTBE	0.13	0.36
Naphthalene	2.62	26.2	Naphthalene	0.268288	0.524
o-xylene	0.62062	2.17	o-xylene	0.138446	0.434
Styrene	0.639	2.13	Styrene	0.287976	0.426
Tetrachloroethene	1.2882	3.39	Tetrachloroethene	0.404088	0.678
Tetrahydrofuran	0.413	1.48	Tetrahydrofuran	0.14	0.3
Toluene	0.5278	1.89	Toluene	0.11	0.38
trans-1,2-Dichloroethene	0.5544	1.98	trans-1,2-Dichloroethene	0.293832	0.396
Trichloroethene	0.52626	2.69	Trichloroethene	0.24	0.54
Trichlorofluoromethane	0.693	2.48	Trichlorofluoromethane	0.22	0.5
Vinyl Acetate	0.64064	1.76	Vinyl Acetate	0.331584	0.352
Vinyl Chloride	0.24832	1.28	Vinyl Chloride	0.092672	0.256

## TO-14 Compound List MDL/PQL in $\mu\text{g}/\text{m}^3$ and ppbV

TO-14 Compound List	MDL (ppbv)	PQL (ppbv)	TO-14 Compound List	MDL ( $\mu\text{g}/\text{m}^3$ )	PQL ( $\mu\text{g}/\text{m}^3$ )
1,1 - Dichloroethene	0.2	0.5	1,1 - Dichloroethene	0.81	2.06
1,1,1-Trichloroethane	0.14	0.5	1,1,1-Trichloroethane	0.83	2.77
1,1,2,2-Tetrachloroethane	0.15	0.5	1,1,2,2-Tetrachloroethane	1.05	3.49
1,1,2-Trichloroethane	0.19	0.5	1,1,2-Trichloroethane	1.05	2.77
1,1-Dichloroethane	0.17	0.5	1,1-Dichloroethane	0.7	2.06
1,2-Dichlorobenzene	0.1	0.5	1,2-Dichlorobenzene	0.61	3.06
1,2-Dichloroethane	0.16	0.5	1,2-Dichloroethane	0.66	3.06
1,2-Dichloropropane	0.22	0.5	1,2-Dichloropropane	1	2.31
1,3-Dichlorobenzene	0.06	0.5	1,3-Dichlorobenzene	0.67	3.06
1,4-Dichlorobenzene	0.11	0.5	1,4-Dichlorobenzene	0.91	3.06
Benzene	0.28	0.5	Benzene	0.61	1.82
Carbon Tetrachloride	0.12	0.5	Carbon Tetrachloride	1.02	3.2
Chlorobenzene	0.09	0.5	Chlorobenzene	0.43	2.34
Chloroform	0.4	0.5	Chloroform	2	4
Chloromethane	0.35	0.5	Chloromethane	0.73	2
cis-1,2-dichloroethene	0.14	0.5	cis-1,2-dichloroethene	0.56	2.01
cis-1,3-Dichloropropene	0.08	0.5	cis-1,3-Dichloropropene	0.37	2.31
Dichlorodifluoromethane	0.15	0.5	Dichlorodifluoromethane	0.75	2.14
Ethyl Benzene	0.09	0.5	Ethyl Benzene	0.35	2.21
Freon 113	0.12	0.5	Freon 113	0.93	3.9
Isopropanol	0.4	10	Isopropanol	1.7	4
m,p-xylene	0.11	1	m,p-xylene	0.53	4
Methylene Chloride	0.19	0.5	Methylene Chloride	0.67	1.77
MTBE	0.14	0.5	MTBE	0.51	1.83
o-xylene	0.14	0.5	o-xylene	0.62	2.21
Tetrachloroethene	0.19	0.5	Tetrachloroethene	1.31	3.45
Toluene	0.14	0.5	Toluene	0.54	1.91
trans-1,2-Dichloroethene	0.14	0.5	trans-1,2-Dichloroethene	0.56	2.01
Trichloroethene	0.1	0.5	Trichloroethene	0.53	2.73
Trichlorofluoromethane	0.14	0.5	Trichlorofluoromethane	0.8	2.86
Vinyl Chloride	0.097	0.5	Vinyl Chloride	0.25	1.3

\*\*\*\* Dived by 1000 for ppmv

\*\*\*\*Divide by 1000 for  $\text{mg}/\text{m}^3$

## TO-3 (Mod) Compound List MDL/PQL in ppbV and $\mu\text{g}/\text{m}^3$

TO-3 Modified	MDL (ppbv)	PQL (ppbv)	TO-3 Modified	MDL ( $\mu\text{g}/\text{m}^3$ )	PQL ( $\mu\text{g}/\text{m}^3$ )
1,2-Dibromoethane(Ethyl dibromide)	0.14	0.5	1,2-Dibromoethane(Ethyl dibromide)	1.07	3.84
1,2-Dichloroethane	0.16	0.5	1,2-Dichloroethane	0.65	2.03
Benzene	0.28	0.5	Benzene	0.89	1.6
Ethyl Benzene	0.09	0.5	Ethyl Benzene	0.31	1.67
Ethyl tert-butyl ether (ETBE)	0.16	0.5	Ethyl tert-butyl ether (ETBE)	0.669	2.09
Isopropanol	0.399	4	Isopropanol	1.6	16.4
Isopropyl ether (DIPE)	0.16	0.5	Isopropyl ether (DIPE)	0.67	2.09
m,p-Xylene	0.11	0.5	m,p-Xylene	0.49	2.05
MTBE	0.14	0.5	MTBE	0.5	1.8
o-Xylene	0.14	0.5	o-Xylene	0.62	2.17
t-Butyl alcohol (t-Butanol)	0.16	0.5	t-Butyl alcohol (t-Butanol)	0.485	1.52
tert-Amyl methyl ether (TAME)	0.16	0.5	tert-Amyl methyl ether (TAME)	0.68	2.09
Toluene	0.14	0.5	Toluene	0.5278	1.89

TO-3 Mod (Gas)	MDL (ppbv)	PQL (ppbv)	TO-3 Mod (Gas)	MDL (ppbv)	PQL (ppbv)
Gasoline	50	100	Gasoline	176	3.52

\*\*\*\*Divide by 1000 for ppmv

\*\*\*\*Divide by 1000 for mg/m<sup>3</sup>

## Fixed Gases Compound List PQL in %

ATSM D 1946 (Fixed gases)	PQL (%)
Carbon Dioxide	0.025
Carbon Monoxide	0.025
Ethane	0.025
Ethene	0.025
Helium	0.005
Hydrogen	0.025
Methane	0.0005
Nitrogen	0.025
Oxygen	0.025

\*\*\*Multiply by 10000 for ppm