



EMSL Analytical, Inc.
 200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax:(856)858-4800/ (856)858-4571
<http://www.EMSL.com> mhowley@emsl.com

EMSL Order: 49999999
 EMSL Sample ID: 49999999-0001
 Received Date: 08/28/2013
 Report Date: 08/29/2013

Project: TO-15 Demo
 Client Sample ID: Room Air

Sampling Date: 08/27/2013
 Canister ID: E12270

Lab File ID: M6214.D
 Sample Vol(ml): 250
 Dilution Factor: 1

Analysis Date: 09/04/2013
 Instrument ID: 5973M
 Analyst Initials: MTH

Dilution #1:M6229.D, 09/05/2013, DF: 5

USEPA Industrial Air Generic Screening Level Summary Table



USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Industrial	
						Carcinogen ug/m3	NonCarcinogen ug/m3
Propylene	115-07-1	58.08	ND		ND	N.E.	1300
Freon 12(Dichlorodifluoromethane)	75-71-8	120.90	ND		ND	N.E.	44
Freon 114(1,2-Dichlorotetrafluoroethan	76-14-2	170.90	ND		ND	N.E.	N.E.
Chloromethane	74-87-3	50.49	0.71		1.5	N.E.	39
n-Butane	106-97-8	58.12	46	D	110	N.E.	N.E.
Vinyl chloride	75-01-4	62.50	ND		ND	2.8	44
1,3-Butadiene	106-99-0	54.09	ND		ND	0.41	0.88
Bromomethane	74-83-9	94.94	ND		ND	N.E.	2.2
Chloroethane	75-00-3	64.52	ND		ND	N.E.	4400
Ethanol	64-17-5	46.07	140	D	260	N.E.	N.E.
Bromoethene(Vinyl bromide)	593-60-2	106.90	ND		ND	0.38	1.3
Freon 11(Trichlorofluoromethane)	75-69-4	137.40	ND		ND	N.E.	310
Isopropyl alcohol(2-Propanol)	67-63-0	60.10	4.9		12	N.E.	3100
Freon 113(1,1,2-Trichlorotrifluoroethan	76-13-1	187.40	ND		ND	N.E.	13000
Acetone	67-64-1	58.08	62	D	150	N.E.	14000
1,1-Dichloroethene	75-35-4	96.94	ND		ND	N.E.	88
Acetonitrile	75-05-8	41.00	0.61		1.0	N.E.	26
Tertiary butyl alcohol(TBA)	75-65-0	74.12	ND		ND	N.E.	N.E.
Bromoethane(Ethyl bromide)	74-96-4	108.00	ND		ND	N.E.	N.E.
3-Chloropropene(Allyl chloride)	107-05-1	76.53	ND		ND	2	0.44
Carbon disulfide	75-15-0	76.14	ND		ND	N.E.	310
Methylene chloride	75-09-2	84.94	ND		ND	1200	260
Acrylonitrile	107-13-1	53.00	ND		ND	0.18	0.88
Methyl-tert-butyl ether(MTBE)	1634-04-4	88.15	ND		ND	47	1300
trans-1,2-Dichloroethene	156-60-5	96.94	ND		ND	N.E.	26
n-Hexane	110-54-3	86.17	ND		ND	N.E.	310
1,1-Dichloroethane	75-34-3	98.96	ND		ND	7.7	N.E.
Vinyl acetate	108-05-4	86.00	ND		ND	N.E.	88
2-Butanone(MEK)	78-93-3	72.10	1.4		4.0	N.E.	2200
cis-1,2-Dichloroethene	156-59-2	96.94	ND		ND	N.E.	N.E.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax:(856)858-4800/ (856)858-4571
<http://www.EMSL.com> mhowley@emsl.com

EMSL Order: 49999999
 EMSL Sample ID: 49999999-0001
 Received Date: 08/28/2013
 Report Date: 08/29/2013

Project: TO-15 Demo
 Client Sample ID: Room Air

Sampling Date: 08/27/2013
 Canister ID: E12270

Lab File ID: M6214.D
 Sample Vol(ml): 250
 Dilution Factor: 1

Analysis Date: 09/04/2013
 Instrument ID: 5973M
 Analyst Initials: MTH

Dilution #1:M6229.D, 09/05/2013, DF: 5

USEPA Industrial Air Generic Screening Level Summary Table



USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Industrial	
						Carcinogen ug/m3	NonCarcinogen ug/m3
Ethyl acetate	141-78-6	88.10	0.81		2.9	N.E.	N.E.
Chloroform	67-66-3	119.40	ND		ND	0.53	43
Tetrahydrofuran	109-99-9	72.11	ND		ND	N.E.	880
1,1,1-Trichloroethane	71-55-6	133.40	ND		ND	N.E.	2200
Cyclohexane	110-82-7	84.16	ND		ND	N.E.	2600
2,2,4-Trimethylpentane(Isooctane)	540-84-1	114.20	ND		ND	N.E.	N.E.
Carbon tetrachloride	56-23-5	153.80	ND		ND	2	44
n-Heptane	142-82-5	100.20	ND		ND	N.E.	N.E.
1,2-Dichloroethane	107-06-2	98.96	ND		ND	0.47	3.1
Benzene	71-43-2	78.11	ND		ND	1.6	13
Trichloroethene	79-01-6	131.40	ND		ND	3	0.88
1,2-Dichloropropane	78-87-5	113.00	ND		ND	1.2	1.8
Methyl Methacrylate	80-62-6	100.12	ND		ND	N.E.	310
Bromodichloromethane	75-27-4	163.80	ND		ND	0.33	N.E.
1,4-Dioxane	123-91-1	88.12	ND		ND	1.6	48
4-Methyl-2-pentanone(MIBK)	108-10-1	100.20	ND		ND	N.E.	1300
cis-1,3-Dichloropropene (1)	10061-01-5	111.00	ND		ND	3.1	8.8
Toluene	108-88-3	92.14	0.98		3.7	N.E.	2200
trans-1,3-Dichloropropene (1)	10061-02-6	111.00	ND		ND	3.1	8.8
1,1,2-Trichloroethane	79-00-5	133.40	ND		ND	0.77	0.088
2-Hexanone(MBK)	591-78-6	100.10	ND		ND	N.E.	13
Tetrachloroethene	127-18-4	165.80	ND		ND	47	18
Dibromochloromethane	124-48-1	208.30	ND		ND	0.45	N.E.
1,2-Dibromoethane	106-93-4	187.80	ND		ND	0.02	3.9
Chlorobenzene	108-90-7	112.60	ND		ND	N.E.	22
Ethylbenzene	100-41-4	106.20	ND		ND	4.9	440
Xylene (p,m)	1330-20-7	106.20	ND		ND	N.E.	44
Xylene (Ortho)	95-47-6	106.20	ND		ND	N.E.	44
Styrene	100-42-5	104.10	ND		ND	N.E.	440
Isopropylbenzene (cumene)	98-82-8	120.19	ND		ND	N.E.	180



EMSL Analytical, Inc.
 200 Route 130 North, Cinnaminson, NJ 08077
 Phone/Fax:(856)858-4800/ (856)858-4571
<http://www.EMSL.com> mhowley@emsl.com

EMSL Order: 49999999
 EMSL Sample ID: 49999999-0001
 Received Date: 08/28/2013
 Report Date: 08/29/2013

Project: TO-15 Demo
 Client Sample ID: Room Air
 Lab File ID: M6214.D
 Sample Vol(ml): 250
 Dilution Factor: 1
Dilution #1:M6229.D, 09/05/2013, DF: 5

Sampling Date: 08/27/2013
 Canister ID: E12270
 Analysis Date: 09/04/2013
 Instrument ID: 5973M
 Analyst Initials: MTH

USEPA Industrial Air Generic Screening Level Summary Table

USEPA: Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air..." Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS), January 1999, (EPA/625/R-96/010b).

Target Compounds	CAS#	MW	Result ppbv	Q	Result ug/m3	Industrial			
						Carcinogen ug/m3	>	NonCarcinogen ug/m3	
Bromoform	75-25-2	252.80	ND		ND	11		N.E.	
1,1,2,2-Tetrachloroethane	79-34-5	167.90	ND		ND	0.21		N.E.	
4-Ethyltoluene	622-96-8	120.20	ND		ND	N.E.		N.E.	
1,3,5-Trimethylbenzene	108-67-8	120.20	ND		ND	N.E.		N.E.	
2-Chlorotoluene	95-49-8	126.60	ND		ND	N.E.		N.E.	
1,2,4-Trimethylbenzene	95-63-6	120.20	ND		ND	N.E.		3.1	
1,3-Dichlorobenzene	541-73-1	147.00	ND		ND	N.E.		N.E.	
1,4-Dichlorobenzene	106-46-7	147.00	29		180	1.1	X	350	
Benzyl chloride	100-44-7	126.00	ND		ND	0.25		0.44	
1,2-Dichlorobenzene	95-50-1	147.00	ND		ND	N.E.		88	
1,2,4-Trichlorobenzene	120-82-1	181.50	ND		ND	N.E.		0.88	
Hexachloro-1,3-butadiene	87-68-3	260.80	ND		ND	0.56		N.E.	
Naphthalene	91-20-3	128.17	33	D	170	0.36	X	1.3	X

The > column is used to flag exceedences as marked X

Carcinogen Exceedence

Value exceeds the theoretical risk that 1 additional case of cancer will occur in a population of 1 million than statistically expected. This is a theoretical risk and not an actual epidemiological one.

NonCarcinogen Exceedence

Value exceeds the theoretical risk that 1 in a population of 100,000 will experience deliterious health effects. This is a theoretical risk and not an actual epidemiological one.

Agency Definitions

EPA III= USEPA Region 3, Mid-Atlantic

Reference

EPA Region III Risk-Based Concentration (RBC) Table, Nov 2012.

Compound Exposure Definitions

NE= No Limit Established

Exposure Limit Definitions

RBC= Risk Based Concentration

(1) RBC based on total isomers



NJDEP Certification #: 03036

Please visit our website at <http://www.emsl.com>

© 2012, EMSL Analytical, Inc., All rights reserved. No part of this report may be reproduced or otherwise distributed or used without the express written consent of EMSL.