




FIELD SAMPLING TEST REPORT	
Customer Information	LST.FAI.HBDCResults@ul.com UL Verification Services, Inc. 3251 Old Lee Highway, Suite 100 Fairfax, VA 22030
HB Project Number	2009049NY
Date Received	October 14, 2020
Testing Laboratory Location	UL Environment - Marietta, 2211 Newmarket Parkway, Marietta, GA 30067-9399 USA
Method	USEPA Compendium Method TO-17 ; ASTM 6196
Authorized by	 Allyson M. McFry Chemistry Laboratory Director
<p>Sampling: Reported data were obtained from samples and sampling information as provided by the on-site investigator. These data and general information are provided to assist the investigator in an overall IAQ assessment. Interpretation of data is left to the client or persons who conducted the field work.</p> <p>This test is accredited and meets the requirements of ISO/IEC 17025 as verified by ANSI National Accreditation Board. Refer to certificate and scope of accreditation AT-1297.</p> <p>This report shall not be reproduced, except in full, without permission from UL. Results contained within this report only apply to the actual product tested under the testing conditions documented in this report.</p>	

Date Issued: November 11, 2020
Product #: 1001053392-3387946
Report #: 1001053392-3387946
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UL ID:	SV1TFD
Sample Date:	October 11, 2020
Volume (L):	18.5

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		BURN_06_LRHall_1Day_AM	
Total Volatile Organic Compounds		318 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
64-19-7	Acetic acid	42.0	17.1
100-42-5	Styrene [†]	34.5	8.1
107-21-1	1,2-Ethanediol (Ethylene glycol) [†]	21.6	8.5
91-20-3	Naphthalene [†]	21.0	4.0
108-95-2	Phenol [†]	20.5	5.3
98-01-1	Furfural (2-Furaldehyde)	20.0	5.1
116-09-6	2-Propanone, 1-hydroxy	19.0	6.3
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester (component of Texanol)	14.4	1.6
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	10.3	1.2
66-25-1	Hexanal	10.2	2.5
108-88-3	Toluene (Methylbenzene)	10.0	2.6
68-12-2	Formamide, N,N-dimethyl ^{††}	9.9	3.3
71-43-2	Benzene [†]	8.5	2.7
5877-42-9	1-Octyn-3-ol, 4-ethyl*	7.1	1.1
497-23-4	2(5H)-Furanone*	6.8	2.0
90-05-1	Phenol, 2-methoxy*	6.4	1.3
1120-21-4	Undecane	6.4	1.0
95-13-6	Indene*	6.1	1.3
564-94-3	Bicyclo[3.1.1]hept-2-ene-2-carboxaldehyde, 6,6-dimethyl*	5.7	0.8
98-83-9	α-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	5.6	1.2
4344-87-0	3H-Pyrazol-3-one, 1,2-dihydro-5-methyl-*	5.4	1.3
106-44-5	Phenol, 4-methyl (p-Cresol)*	5.4	1.2
141-32-2	Butyl acrylate (2-Propenoic Acid, butyl ester)	5.2	1.0
541-02-6	Cyclopentasiloxane, decamethyl	5.0	0.3
29621-55-4	1-Cyclohexene-1-methanol, 4-(1-methylethenyl)-, formate*	4.8	0.7
123-51-3	1-Butanol, 3-methyl*	4.7	1.3
62185-21-1	Octane, 3,4,5,6-tetramethyl-*	4.5	0.6
100-52-7	Benzaldehyde	4.4	1.0
1000293-37-9	5-Chloropentanoic acid, 6-ethyl-3-octyl ester*	4.2	0.4
767-60-2	1H-Indene, 3-methyl*	4.2	0.8
1330-20-7	Xylenes (Total) [†]	4.0	0.9
1000277-14-8	3-Oxaspiro[5.5]undecane-1,5-dione, 4-methyl-3-phenyl-*	3.9	0.3
100-47-0	Benzonitrile	3.7	0.9
100-41-4	Benzene, ethyl [†]	3.6	0.8

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CAS Number	Compound	Concentration	
		µg/m³	ppb
25551-13-7	Trimethylbenzene (All Isomers)	3.4	0.7
208-96-8	Acenaphthylene*	3.2	0.5
1000314-53-7	Carbonic acid, decyl propyl ester*	3.0	0.3
10503-96-5	Butane, 1-(2-chloroethoxy)-*	2.9	0.5
1120-73-6	2-Cyclopenten-1-one, 2-methyl*	2.8	0.7
102-76-1	1,2,3-Propanetriol, triacetate (Triacetin)*	2.8	0.3
123-86-4	Acetate, butyl	2.8	0.6
108-65-6	1-Methoxy-2-propyl acetate*	2.6	0.5
93-51-6	Phenol, 2-methoxy-4-methyl*	2.6	0.5
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	2.5	0.6
112-15-2	Ethanol, 2-(2-ethoxyethoxy), acetate*	2.5	0.3
120-92-3	Cyclopentanone	2.3	0.7
56728-10-0	1-Hexene, 3,4,5-trimethyl*	2.3	0.4
62185-54-0	Nonane, 5-(1-methylpropyl)*	2.2	0.3
5077-67-8	1-Hydroxy-2-butanone*	2.2	0.6
3438-46-8	Pyrimidine, 4-methyl*	2.2	0.6
3777-69-3	Furan, 2-pentyl	2.1	0.4
1192-62-7	Ethanone, 1-(2-furanyl)*	2.0	0.5
95-93-2	Benzene, 1,2,4,5-tetramethyl	2.0	0.4

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UL ID:	SV1TFDF
Sample Date:	October 11, 2020
Volume (L):	18.0

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		BURN_06_LRHALL_Field Blank	
Total Volatile Organic Compounds		BQL µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
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 Product #: 1001053392-3387946
 Report #: 1001053392-3387946
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UL ID:	SV2TFD
Sample Date:	October 11, 2020
Volume (L):	18.5

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		BURN_06_LRHall_1Day_PM	
Total Volatile Organic Compounds		158 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
100-42-5	Styrene [†]	28.8	6.8
91-20-3	Naphthalene [†]	12.7	2.4
71-43-2	Benzene [†]	11.1	3.5
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester (component of Texanol)	10.1	1.1
64-19-7	Acetic acid	9.5	3.8
66-25-1	Hexanal	7.9	1.9
98-01-1	Furfural (2-Furaldehyde)	7.5	1.9
108-95-2	Phenol [†]	7.2	1.9
108-88-3	Toluene (Methylbenzene)	6.0	1.6
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	6.0	0.7
116-09-6	2-Propanone, 1-hydroxy	5.5	1.8
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	5.5	1.3
141-32-2	Butyl acrylate (2-Propenoic Acid, butyl ester)	4.3	0.8
98-83-9	α-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	4.2	0.9
19549-87-2	1-Heptene, 2,4-dimethyl*	3.6	0.7
120-92-3	Cyclopentanone	3.4	1.0
100-52-7	Benzaldehyde	3.2	0.7
271-89-6	Benzofuran*	3.1	0.6
95-13-6	Indene*	3.0	0.6
110-62-3	Pentanal	2.7	0.8
30434-65-2	2-Cyclopenten-1-one, 3,4,4-trimethyl-*	2.7	0.5
100-47-0	Benzonitrile	2.7	0.6
123-51-3	1-Butanol, 3-methyl*	2.6	0.7
25551-13-7	Trimethylbenzene (All Isomers)	2.6	0.5
620-02-0	2-Furancarboxaldehyde, 5-methyl*	2.5	0.6
108-65-6	1-Methoxy-2-propyl acetate*	2.4	0.4
1075-04-3	dl-Erythro-1-phenyl-1,2-propanediol*	2.3	0.4
71-36-3	1-Butanol (N-Butyl alcohol)	2.2	0.7
100-41-4	Benzene, ethyl [†]	2.1	0.5
620-17-7	Phenol, 3-ethyl-*	2.1	0.4
108-11-2	2-Pentanol, 4-methyl*	2.1	0.5
1330-20-7	Xylenes (Total) [†]	2.0	0.5

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UL ID:	SV3TFD
Sample Date:	October 11, 2020
Volume (L):	17.7

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		BURN-06_LRHall_1Day_60 min	
Total Volatile Organic Compounds		178 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
64-19-7	Acetic acid	22.0	8.9
91-20-3	Naphthalene†	14.0	2.7
71-43-2	Benzene†	11.0	3.4
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester (component of Texanol)	10.8	1.2
108-95-2	Phenol†	9.7	2.5
98-01-1	Furfural (2-Furaldehyde)	9.3	2.4
66-25-1	Hexanal	9.0	2.2
116-09-6	2-Propanone, 1-hydroxy	7.6	2.5
108-88-3	Toluene (Methylbenzene)	7.0	1.9
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	6.8	0.8
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	6.4	1.6
141-32-2	Butyl acrylate (2-Propenoic Acid, butyl ester)	4.5	0.9
120-92-3	Cyclopentanone	4.5	1.3
98-83-9	a-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	4.5	0.9
271-89-6	Benzofuran*	3.5	0.7
7438-05-3	Octane, 1-azido-*	3.4	0.5
95-13-6	Indene*	3.2	0.7
100-52-7	Benzaldehyde	3.1	0.7
110-62-3	Pentanal	3.1	0.9
71-36-3	1-Butanol (N-Butyl alcohol)	3.0	1.0
90-05-1	Phenol, 2-methoxy*	3.0	0.6
100-47-0	Benzonitrile	2.8	0.7
71-41-0	1-Pentanol (N-Pentyl alcohol)	2.7	0.8
106-44-5	Phenol, 4-methyl (p-Cresol)*	2.7	0.6
25551-13-7	Trimethylbenzene (All Isomers)	2.6	0.5
620-02-0	2-Furancarboxaldehyde, 5-methyl*	2.6	0.6
108-65-6	1-Methoxy-2-propyl acetate*	2.5	0.5
100-41-4	Benzene, ethyl†	2.2	0.5
1330-20-7	Xylenes (Total) †	2.2	0.5
98-86-2	Acetophenone (Ethanone, 1-phenyl)*	2.1	0.4
767-60-2	1H-Indene, 3-methyl*	2.1	0.4
872-05-9	1-Decene	2.0	0.4
123-86-4	Acetate, butyl	2.0	0.4
100-51-6	Benzyl alcohol (Benzenemethanol)*	2.0	0.5
100-42-5	Styrene†	24.8	5.8

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UL ID:	SV3TFD
Sample Date:	October 11, 2020
Volume (L):	17.7

CAS Number	Compound	Concentration	
		µg/m ³	ppb
80-56-8	Pinene, alpha (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	2.0	0.4

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TVOC (total volatile organic compounds) are calibrated relative to toluene.

Field Blanks: Reported concentrations based on 18.0 L of volume sampled for VOCs. Actual field blanks are not intended to have a measurable amount of air sampled.

†Denotes quantified using multipoint authentic standard curve. Other VOCs quantified relative to toluene.

Values below 2.0 µg/m³ are for information purposes only. Chemical was detected, but below the quantifiable level of 0.04 µg based on a standard of 18 L air collection volume.

UL Environment's quality assurance program monitors blank sorbent media to ensure that the residual background does not exceed UL Environment's quality objective of ≤ 36 ng of total VOC.

Project # 2009049NY

1001053392 - 3387946



ACTIVE CHEMICAL SAMPLING CHAIN OF CUSTODY

ACTIVE CHEMICAL SAMPLING CHAIN OF CUSTODY			
Company: ULVS (Healthy Buildings)		Contact: CARESULTS@UL.COM	Project/P.O./Job Number: 2009049NY_B6_D1
Address: 3251 Old Lee Highway #100 Fairfax, VA 22030		Phone: 571.655.7919 Fax: 703.323.4440	Sample Date: 11 OCT 2020 Investigator: SAM.HORNER
Please check the appropriate fields; Use separate COC for each sample method.	VOLATILE ORGANICS: IVOC SCAN: ____ TOP 20 IVOC ____ TVOC ONLY ____ OTHER ____ B.T.E.X. ____		
	ALDEHYDE SCAN: ____ FORMALDEHYDE ONLY ____	ANALYSIS: LEED V4 ____ LEED V4.1 ____ OTHER ____ B.T.E.X. ____	
	TAT: Standard <input checked="" type="checkbox"/> Next Day Rush* ____ * Rush charges apply; please call in advance to confirm availability		

Comments:

[illegible]

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Description

3009049NY

Customer: UL Environment Inc.

Received Date: 2020-OCT-14 09:05:17 AM

1 of 2

Date Issued: November 11, 2020
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