




FIELD SAMPLING TEST REPORT	
Customer Information	LST.FAI.HBDCResults@ul.com UL Verification Services, Inc. 3251 Old Lee Highway, Suite 100 Fairfax, VA 22030 USA
HB Project Number	2009049NY
Date Received	October 13, 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 #: 1001053392-3387945
Report #: 1001053392-3387945R2
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Supersedes Report #: 1001053392-3387943R1

UL ID:	SV1TFD
Sample Date:	October 9, 2020
Volume (L):	17.3

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		Burn_06_LR_Hall_Pre	
Total Volatile Organic Compounds		869 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
77-68-9	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester (component of Texanol)	152	17.2
25265-77-4	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	125	14.1
124-18-5	Decane	52.0	8.9
111-84-2	Nonane	22.1	4.2
1120-21-4	Undecane	21.6	3.4
629-50-5	Tridecane	21.4	2.8
2847-72-5	Decane, 4-methyl	21.3	3.3
3234-28-4	Oxirane, dodecyl-*	19.8	2.3
275-51-4	Azulene*	17.3	3.3
124-19-6	Nonyl aldehyde (Nonanal) [†]	15.8	2.7
1678-92-8	Cyclohexane, propyl	15.2	2.9
1678-93-9	Cyclohexane, butyl	14.6	2.5
112-40-3	Dodecane [†]	14.2	2.0
110-82-7	Cyclohexane	12.0	3.5
343855-44-7	o-Menthan-8-ol*	11.9	1.9
2051-30-1	Octane, 2,6-dimethyl	11.2	1.9
5911-04-6	Nonane, 3-methyl	10.0	1.7
64-19-7	Acetic acid	9.8	4.0
17301-94-9	Nonane, 4-methyl	9.8	1.7
1000193-72-9	2,3,4-Trimethyl-hex-3-enal*	9.8	1.7
67446-07-5	cis-5-Decen-1-yl acetate*	9.6	1.2
1000406-16-5	Undec-10-ynoic acid, dodecyl ester*	9.5	0.7
5877-42-9	1-Octyn-3-ol, 4-ethyl*	8.7	1.4
6975-98-0	Decane, 2-methyl	8.1	1.3
51607-94-4	Z,E-7,11-Hexadecadien-1-yl acetate*	8.1	0.7
871-83-0	Nonane, 2-methyl	8.0	1.4
1883-13-2	Dodecanoic acid, 3-hydroxy-*	7.9	0.9
17302-32-8	Nonane, 3,7-dimethyl	7.2	1.1
7058-05-1	Cyclohexane, 1-ethyl-2,3-dimethyl	7.2	1.2
62338-08-3	3-Hexene, 3-ethyl-2,5-dimethyl*	7.1	1.2
541-02-6	Cyclopentasiloxane, decamethyl	7.0	0.5
81983-71-3	Cyclohexane, 1,1-dimethyl-2-propyl*	7.0	1.1
26730-14-3	Tridecane, 7-methyl*	6.9	0.9
1000309-21-9	Sulfurous acid, cyclohexylmethyl undecyl ester*	6.9	0.5
493-02-7	t-Decahydronaphthalene	6.9	1.2

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CAS Number	Compound	Concentration	
		µg/m³	ppb
244074-78-0	Pentanoic acid, 2,2,4-trimethyl-3-hydroxy-, isobutyl ester*	6.8	0.8
62016-18-6	Octane, 5-ethyl-2-methyl*	6.7	1.0
287-92-3	Cyclopentane	6.7	2.3
1560-97-0	Dodecane, 2-methyl*	6.5	0.9
629-59-4	Tetradecane†	6.2	0.8
131141-69-0	2,2-Dimethylpropionic acid, dodecyl ester*	6.1	0.6
108-88-3	Toluene (Methylbenzene)	6.1	1.6
61142-23-2	Cyclohexane, (2,2-dimethylcyclopentyl)*	6.0	0.8
6117-97-1	Dodecane, 4-methyl*	5.9	0.8
21078-65-9	1-Decanol, 2-ethyl	5.8	0.8
66-25-1	Hexanal	5.7	1.4
1000152-47-3	trans-Decalin, 2-methyl-*	5.6	0.9
17312-57-1	Dodecane, 3-methyl*	5.5	0.7
13151-81-0	Undecane, 6-cyclohexyl-	5.5	0.6
932-40-1	trans-1,2-Diethyl cyclopentane*	5.4	1.0
142-96-1	n-Butyl ether	5.3	1.0
100-52-7	Benzaldehyde	4.9	1.1
74367-31-0	Propanoic acid, 2-methyl-, 2-ethyl-3-hydroxyhexyl ester*	4.4	0.5
1678-82-6	Cyclohexane, 1-methyl-4-isopropyl, trans	4.2	0.7
2456-28-2	Decane, 1,1'-oxybis*	4.1	0.3
5881-17-4	Octane, 3-ethyl	4.1	0.7
13150-81-7	Decane, 2,6-dimethyl	3.8	0.5
10059-13-9	2-Undecanethiol, 2-methyl*	3.6	0.4
1000142-34-6	2,3-Dioxabicyclo[2.2.1]heptane, 1-methyl-*	3.6	0.8
1000309-19-5	Sulfurous acid, dodecyl 2-ethylhexyl ester*	3.5	0.2
54411-01-7	Cyclohexane, 1-methyl-2-pentyl*	3.4	0.5
106-97-8	Butane	3.2	1.3
2216-34-4	Octane, 4-methyl*	3.2	0.6
92-52-4	1,1'-Biphenyl*	3.1	0.5
62016-30-2	Octane, 2,3,3-trimethyl-*	3.1	0.5
78-70-6	3,7-Dimethyl-1,6-octadien-3-ol (Linalool)	3.1	0.5
702-79-4	Adamantane, 1,3-dimethyl*	3.1	0.5
91-57-6	Naphthalene, 2-methyl	2.9	0.5
111-76-2	Ethanol, 2-butoxy	2.9	0.6
15869-89-3	Octane, 2,5-dimethyl*	2.9	0.5
112-53-8	1-Dodecanol*	2.8	0.4
13828-37-0	Cyclohexanemethanol, 4-(1-methylethyl)-, cis-*	2.8	0.4
7045-71-8	Undecane, 2-methyl	2.7	0.4
74645-98-0	Dodecane, 2,7,10-trimethyl*	2.7	0.3
71-36-3	1-Butanol (N-Butyl alcohol)	2.7	0.9
1000160-77-0	1-Heptanal, 3,5,5-triethyl-*	2.6	0.3
100-42-5	Styrene†	2.4	0.6
71-43-2	Benzene†	2.3	0.7

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Volume (L):	17.3

CAS Number	Compound	Concentration	
		µg/m ³	ppb
1000462-96-7	(+)-cis-Verbenol, 2-methylpropionate*	2.2	0.2
645-10-3	Cyclodecane, 1,7-dimethyl-4-(1-methylethyl)-*	2.2	0.3
123-86-4	Acetate, butyl	2.2	0.5
79-41-4	2-Propenoic acid, 2-methyl*	2.0	0.6

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UL ID:	SV1TFDF
Sample Date:	October 9, 2020
Volume (L):	18.0

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		BURN_064_LR_Hall_Field Blank	
Total Volatile Organic Compounds		BQL	
CAS Number	Compound	Concentration	
		µg/m³	ppb
---	none	---	---

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UL ID:	SV2TFD
Sample Date:	October 10, 2020
Volume (L):	17.3

CONCENTRATIONS OF TOTAL AND INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

Sample Location/Description		Burn_06_LR_Hall_Post	
Total Volatile Organic Compounds		79.3 µg/m³	
CAS Number	Compound	Concentration	
		µg/m³	ppb
71-43-2	Benzene [†]	22.9	7.2
100-42-5	Styrene [†]	16.2	3.8
64-19-7	Acetic acid	10.6	4.3
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	7.0	1.7
98-01-1	Furfural (2-Furaldehyde)	6.8	1.7
91-20-3	Naphthalene [†]	5.1	1.0
116-09-6	2-Propanone, 1-hydroxy	4.7	1.5
108-88-3	Toluene (Methylbenzene)	4.5	1.2
108-95-2	Phenol [†]	4.2	1.1
66-25-1	Hexanal	3.4	0.8
98-83-9	a-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	2.4	0.5
141-32-2	Butyl acrylate (2-Propenoic Acid, butyl ester)	2.3	0.4
120-92-3	Cyclopentanone	2.2	0.6
98-00-0	2-Furanmethanol*	2.0	0.5
90-05-1	Phenol, 2-methoxy*	2.0	0.4

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.

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UL ID:	SV2TFD
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Project # 2009049NY



1001053392-3387945

ACTIVE CHEMICAL SAMPLING CHAIN OF CUSTODY								
Company: ULVS (Healthy Buildings)			Contact: CARESULTS@UL.COM			Project/P.O./Job Number: 2009049NY		
Address: 3251 Old Lee Highway #100 Fairfax, VA 22030			Phone: 571.655.7919 Fax: 703.323.4440			Sample Date: 09-10 OCT 2020 Investigator: SAM.HORNER		
Please check the appropriate fields; Use separate COC for each sample method.	VOLATILE ORGANICS: IVOC SCAN: <u>TOP 20 IVOC</u> <u>TVOC ONLY</u> <u>OTHER</u> <u>B.T.E.X.</u>							
	ALDEHYDE SCAN: <u>FORMALDEHYDE ONLY</u>				ANALYSIS: LEED V4 <u>LEED V4.1</u> <u>OTHER</u> <u>B.T.E.X.</u>			
	TAT: Standard <u>X</u> Next Day Rush* <u> </u> * Rush charges apply; please call in advance to confirm availability							
Comments:								
UL ID	SAMPLE ID/ TUBE ID	SAMPLE LOCATION/ DESCRIPTION	START TIME	STOP TIME	TIME SAMPLED (MIN)	PUMP ID #	FLOW RATE (L/MIN)	VOLUME (L)
✓01	2009049NY-06A/ s/n B26945	Burn_06_LR_Hall_Pre	09OCT 17:40	09OCT 18:40	60	4257	0.288 L	17.26 L
✓02	2009049NY-06B/ s/n B27006	Burn_06_LR_Hall_Post	10OCT 12:15	10OCT 13:15	60	4257	0.288 L	17.29 L
✓01F	2009049NY-06C/ s/n B26978	Burn_06_LR_Hall_Field Blank						n/a
Released By: SAM.HORNER (Print/Sign) <i>[Signature]</i>			Date/Time: 12OCT2020		Method of Shipment: UPS Next Da			
Received By: <i>[Signature]</i>			Date/Time: 10/13/20 10:30 AM		Sample Condition: Acceptable			
					<div> <div>3387945</div> <div> Description 2009049NY 3387945 </div> </div>			
					Customer: UL Environment Inc. Received Date: 2020-OCT-14 09:05:17 AM Aurora Project No.: 1001053392 Order No.: Oracle Project No.:			

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