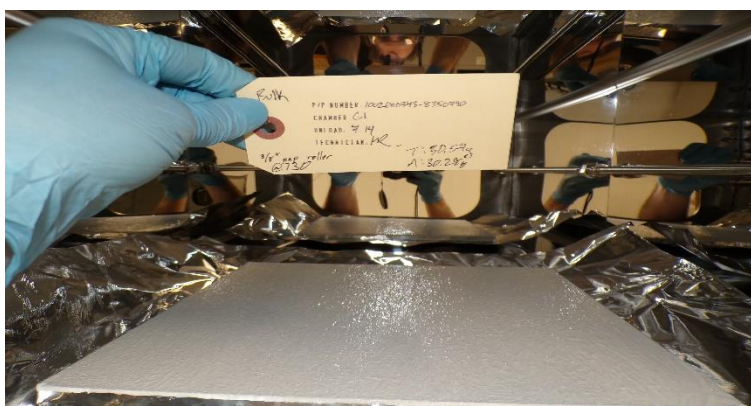


GREENGUARD CERTIFICATION TEST REPORT					
Customer Information	KEIM Mineral Coatings of America, Inc. Roy Suttles 10615 Texland Blvd # 600 Charlotte NC 28273-6201 USA				
	Lime Wall Paint				
Product Description	Lime Wall Paint				
Test Group	Coatings-01				
Category	Paints & Coatings				
Test Type	Certification		Year 5		
Test Method	UL 2821, UL GREENGUARD Certification Program Method for Measuring and Evaluating Chemical Emissions From Building Materials, Finishes and Furnishings, Edition 2, Revision Date 8/24/2022				
	Environment	TVOC	Formaldehyde	Total Aldehydes	CREL/TLV
GREENGUARD	Office	✓	✓	✓	✓
GREENGUARD Gold	Office	✓	✓	✓	✓
	Classroom	✓	✓	✓	✓
✓ - meets criteria; X - over criteria					
Authorized by	 Allyson M. McFry Chemistry Laboratory Director				

MODELING FOR PREDICTED AIR CONCENTRATION					
Certification Program	Environment Basis	Modeling Basis	Surface Area (m ²)	Room Volume (m ³)	ACH (1/hr)
GREENGUARD and GREENGUARD Gold Office	CDPH/EHLB/Standard Method	wall	33.4	30.6	0.68
GREENGUARD Gold Classroom	CDPH/EHLB/Standard Method	wall	94.6	231	0.82

Note that certain environments and/or modeling scenarios may prevent assessment of low level CREL and TLV analytes due to the emissions being below the lower LOQ (0.04 µg). For example, benzene ½ CREL is 1.5 µg/m³.

PHOTOGRAPH OF SAMPLE



GREENGUARD RESULTS SUMMARY

Product Description		Lime Wall Paint	
GREENGUARD Acceptable IAQ Criteria		168 Hour Product Measurement	Product Compliance for IAQ
TVOC ^a	≤ 0.5 mg/m ³	0.026 mg/m ³	Yes
Formaldehyde	≤ 0.05 ppm	< 0.002 ppm	Yes
Total Aldehydes ^b	≤ 0.10 ppm	0.002 ppm	Yes
Individual VOCs	all ≤ 1/10 TLV	----- ^c	Yes
^a "TVOC" is the sum of all VOCs measured via TD/GC/MS which elute between n-hexane (C ₆) and n-hexadecane (C ₁₆) quantified using calibration to a toluene surrogate. ^b "Total Aldehydes" is the sum of all measured normal aldehydes from formaldehyde to nonanal, plus benzaldehyde. Heptanal through nonanal are analyzed using TD/GC/MS. The remaining aldehydes are analyzed using HPL/UV methodology. All aldehydes are quantified to authentic standards. ^c All individual VOCs detected met the criteria of less than 1/10 the ACGIH established threshold limit values (TLVs).			

PROJECT DESCRIPTION

This study was conducted using a UL Environment's GREENGUARD test method following the requirements of GREENGUARD Certification program. The product was monitored for emissions of total volatile organic compounds (TVOC), formaldehyde, target list aldehydes, and other individual volatile organic compounds (VOCs) over a 168-hour exposure period. These emissions were measured, and the resultant air concentrations were determined for each of the potential pollutants. Determination of compliance is based on predicted air concentrations modeled using the GREENGUARD program room loading.

Report Outline:

Table 1	Environmental Chamber Study Parameters
Table 2	Emission Factors and Predicted Air Concentrations
Table 3	Chamber Concentrations of Identified VOCs
Table 4	Emission Factors of Identified VOCs
Table 5	Chamber Concentrations of Target List Aldehydes
Table 6	Emission Factor of Target List Aldehydes
Table 7	Supplemental Emissions Information
Chain of Custody	Chain of Custody
Appendix 1	GREENGUARD Gold Results Summary

Download more information regarding UL's technical references and resources, product evaluation methodologies information, quality control program, and environmental chamber evaluations from our website [click here](#) or <https://www.ul.com/offerings/greenguard-certification>

For RSD, Quality Assurance Report or other quality documents, [Request](#) here or contact ULE.

TABLE 1

ENVIRONMENTAL CHAMBER STUDY PARAMETERS			
Product Description	Lime Wall Paint		
Product Manufacture Date	Not Provided		
Product Collection Date	Not Provided		
Product Shipping Date	June 25, 2025		
Date Received	June 26, 2025		
Test Description	The product was received by UL Environment as packaged and shipped by the customer. The package was visually inspected and stored in a controlled environment immediately following sample check-in. Just prior to loading, the product was unpackaged, and the product was applied to a ½" drywall using a ¾" nap roller and an application rate of 335.22 g/m². The sample was placed inside the environmental chamber and tested according to the specified protocol.		
Test Period	July 7, 2025 - July 14, 2025**		
Area	one-sided area = 0.0912 m²		
Environmental Chamber ID and Volume	SG1 - 0.0844 m³		
Product Loading	1.08 m²/m³		
Test Conditions	1.00 ± 0.05 ACH 50% RH ± 5% RH 21.9°C - 23.4°C		
*Accredited Laboratory Locations	Testing Laboratory	Analytical Laboratory	Technical Reporting Location
	ULE - Marietta	ULE - Marietta	ULE - Marietta

**Unable to confirm product meets all GREENGUARD sampling requirements. Date(s) not provided on the Chain of Custody.

The temperature range specification is 23°C ± 1°. The actual temperature range listed above may vary slightly. If the range is outside this specification, data was reviewed to ensure a negative impact did not occur.

*Accredited Laboratory Locations	
Location	Address
ULE - Marietta	UL Environment 2211 Newmarket Parkway, Marietta, GA 30067-9399 USA
ULE - Guangzhou	UL Verification Services (Guangzhou) Room 101, 201, 301, 501, 502, 503, Building A1, No.25. South of Huanshi Avenue, Nansha District, Guangzhou, Guangdong, China
ULE - Cabiato	UL International Italia S.r.l ATTN: IAQ Laboratory Via Europa, 9, I – 22060 – Cabiato (Como), Italia
ULE - Vietnam	UL VS (VIET NAM) CO. LTD., Lot C5, Conurbation 2, Street K1, Cat Lai Industrial Zone, Thanh My Loi Ward, District 2, Ho Chi Minh City, Vietnam
UL - Shimadzu	Shimadzu Techno-Research, Inc. 1, Nishinokyo-Shimoaicho Nakagyo-ku, Kyoto 604-8436 Japan
KCL	Korea Conformity Laboratories #805, I-Valley, 149 Gongdan-ro Gunpo-si, Gyeonggi-do, 15849 Korea

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.

TABLE 2

Product Description		Lime Wall Paint		
TVOC CHAMBER CONCENTRATIONS, EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS				
Elapsed Exposure Hour*	Chamber Concentration $\mu\text{g}/\text{m}^3$	Emission Factor $\mu\text{g}/\text{m}^2\cdot\text{hr}$	Predicted Air Concentration** $\mu\text{g}/\text{m}^3$	
0 (Background)	BQL	BQL	---	
6				
24	546	505	810	
48	123	114	237	
72	70.1	64.8	116	
96	53.1	49.2	70	
168	25.1	23.3	26	
Power Law Decay Constant = $k_T = 1.77$				
FORMALDEHYDE CHAMBER CONCENTRATIONS, EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS				
Elapsed Exposure Hour*	Chamber Concentration $\mu\text{g}/\text{m}^3$	Emission Factor $\mu\text{g}/\text{m}^2\cdot\text{hr}$	Predicted Air Concentration**	
			$\mu\text{g}/\text{m}^3$	ppm
0 (Background)	BQL	BQL	---	---
6				
24	BQL	BQL	< 3	< 0.002
48	BQL	BQL	< 3	< 0.002
72	BQL	BQL	< 3	< 0.002
96	BQL	BQL	< 3	< 0.002
168	BQL	BQL	< 3	< 0.002
TARGET LIST ALDEHYDES CHAMBER CONCENTRATIONS, EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS				
Elapsed Exposure Hour*	Chamber Concentration $\mu\text{g}/\text{m}^3$	Emission Factor $\mu\text{g}/\text{m}^2\cdot\text{hr}$	Predicted Air Concentration**	
			$\mu\text{g}/\text{m}^3$	ppm
0 (Background)	BQL	BQL	---	---
6				
24	32.0	29.6	47	0.010
48	14.8	13.6	26	0.005
72	9.8	9.0	18	0.003
96	10.2	9.4	14	0.003
168	8.4	7.7	9	0.002
Power Law Decay Constant = $k_A = 0.858$				

*Exposure hours are nominal (± 1 hour).

BQL = Below quantifiable level of 0.04 μg based on a standard 18 L air collection volume for VOCs and 0.1 μg based on a standard 45 L air collection volume for aldehydes.

**Predicted Air Concentrations are based on GREENGUARD modeling predicted concentration parameters. For more information [click here](#).

The 6-hour elapsed hour point was not collected.

TABLE 3

Product Description		Lime Wall Paint						
CHAMBER CONCENTRATIONS OF IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS								
CAS Number	Compound	Elapsed Exposure Hour (µg/m³)						
		0 (BG)	6	24	48	72	96	168
541-05-9	Cyclotrisiloxane, hexamethyl	BQL		236	10.7	6.4	5.4	4.0
556-67-2	Cyclotetrasiloxane, octamethyl	BQL		176	58.1	24.3	12.4	3.2
71-36-3	1-Butanol (N-Butyl alcohol)†	BQL		128	50.9	37.3	29.8	13.7
57-55-6	1,2-Propanediol (Propylene glycol)	BQL		15.5	5.7	3.6	3.0	
124-13-0	Octanal†	BQL		12.3	7.4	4.2	4.2	3.6
124-19-6	Nonyl aldehyde (Nonanal)†	BQL		12.1	7.4	5.6	6.0	4.8
1066-42-8	Silanediol, dimethyl-*	BQL		11.2	5.5	3.9	4.3	3.2
56114-69-3	Benzaldehyde, 2,5-bis[(trimethylsilyl)oxy]*	BQL		10.5	7.0	4.7	4.0	2.5
541-02-6	Cyclopentasiloxane, decamethyl	BQL		5.8	3.8	3.2	3.4	2.4
1000339-76-0	1,2-Cyclohexanedicarboxylic acid, butyl cyclohexyl ester*	BQL		5.7				
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (2-Ethylhexyl acrylate)	BQL		4.5	2.4	2.0	2.0	
111-71-7	Heptanal (Heptaldehyde)†	BQL		3.3				
3796-70-1	5,9-Undecadien-2-one, 6,10-dimethyl-, (E)-*	BQL		3.1				
104-76-7	1-Hexanol, 2-ethyl†	BQL		3.0				
142-96-1	n-Butyl ether	BQL		2.8				
100-52-7	Benzaldehyde	BQL	2.2					

*Indicates NIST/EPA/NIH best library match only based on retention time and mass spectral characteristics.

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

Quantifiable level is 0.04 µg based on a standard 18 L air collection volume.

The 6-hour elapsed hour point was not collected.

TABLE 4

Product Description		Lime Wall Paint					
EMISSION FACTORS OF IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS							
CAS Number	Compound	Elapsed Exposure Hour (µg/m²•hr)					
		6	24	48	72	96	168
541-05-9	Cyclotrisiloxane, hexamethyl		218	9.9	5.9	5.0	3.7
556-67-2	Cyclotetrasiloxane, octamethyl		163	53.7	22.5	11.5	3.0
71-36-3	1-Butanol (N-Butyl alcohol)†		118	47.1	34.5	27.6	12.7
57-55-6	1,2-Propanediol (Propylene glycol)		14.3	5.3	3.4	2.8	
124-13-0	Octanal†		11.4	6.8	3.9	3.9	3.3
124-19-6	Nonyl aldehyde (Nonanal)†		11.2	6.8	5.1	5.5	4.4
1066-42-8	Silanediol, dimethyl-*		10.4	5.1	3.6	4.0	2.9
56114-69-3	Benzaldehyde, 2,5-bis[(trimethylsilyl)oxy]*		9.7	6.4	4.3	3.7	2.4
541-02-6	Cyclopentasiloxane, decamethyl		5.4	3.5	3.0	3.1	2.2
1000339-76-0	1,2-Cyclohexanedicarboxylic acid, butyl cyclohexyl ester*		5.3				
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (2-Ethylhexyl acrylate)		4.2	2.3	1.8	1.9	
111-71-7	Heptanal (Heptaldehyde)†		3.0				
3796-70-1	5,9-Undecadien-2-one, 6,10-dimethyl-, (E)-*		2.9				
104-76-7	1-Hexanol, 2-ethyl†		2.8				
142-96-1	n-Butyl ether		2.6				
100-52-7	Benzaldehyde		2.1				

*Indicates NIST/EPA/NIH best library match only based on retention time and mass spectral characteristics.

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

Quantifiable level is 0.04 µg based on a standard 18 L air collection volume.

The 6-hour elapsed hour point was not collected.

TABLE 5

Product Description		Lime Wall Paint						
CHAMBER CONCENTRATIONS OF TARGET LIST ALDEHYDES								
CAS Number	Compound	Elapsed Exposure Hour (µg/m³)						
		0 (BG)	6	24	48	72	96	168
4170-30-3	2-Butenal	BQL						
75-07-0	Acetaldehyde	BQL		2.0				
100-52-7	Benzaldehyde	BQL						
5779-94-2	Benzaldehyde, 2,5-dimethyl	BQL						
529-20-4	Benzaldehyde, 2-methyl	BQL						
620-23-5/ 104-87-0	Benzaldehyde, 3- and/or 4-methyl	BQL						
123-72-8	Butanal	BQL						
590-86-3	Butanal, 3-methyl	BQL						
50-00-0	Formaldehyde	BQL						
66-25-1	Hexanal	BQL		2.3				
110-62-3	Pentanal	BQL						
123-38-6	Propanal	BQL						

TABLE 6

Product Description		Lime Wall Paint					
EMISSION FACTORS OF TARGET LIST ALDEHYDES							
CAS Number	Compound	Elapsed Exposure Hour (µg/m²•hr)					
		6	24	48	72	96	168
4170-30-3	2-Butenal						
75-07-0	Acetaldehyde		1.9				
100-52-7	Benzaldehyde						
5779-94-2	Benzaldehyde, 2,5-dimethyl						
529-20-4	Benzaldehyde, 2-methyl						
620-23-5/ 104-87-0	Benzaldehyde, 3- and/or 4-methyl						
123-72-8	Butanal						
590-86-3	Butanal, 3-methyl						
50-00-0	Formaldehyde						
66-25-1	Hexanal		2.1				
110-62-3	Pentanal						
123-38-6	Propanal						

Quantifiable level is 0.1 µg is based on a standard 45 L air collection volume.

The 6-hour elapsed hour point was not collected.

TABLE 7

SUPPLEMENTAL EMISSIONS INFORMATION

The table below represents this product's identified chemical emissions found on certain regulatory lists. This list only provides a statement regarding possible health effects associated with this compound and not the relative risks of exposure. Proper interpretation of the risks associated with exposure to a given regulated compound requires a more detailed evaluation of toxicological activity. Certain purchasing programs may require this information be submitted.

Product Description		Lime Wall Paint					
CAS Number	Compound	✓() = FOUND IN LISTING (CLASS)					
		CAL PROP. 65	NTP	IARC	CAL AIR TOXICS	CREL	TLV
71-36-3	1-Butanol (N-Butyl alcohol) [†]				✓(IVB)		✓
104-76-7	1-Hexanol, 2-ethyl [†]						✓
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (2-Ethylhexyl acrylate)	✓(1)		✓(3)			
75-07-0	Acetaldehyde	✓(1)	✓(2B)	✓(2B)	✓(IIA)	✓	✓

[†]Denotes quantified using multipoint authentic standard curve

CAL Prop. 65: California Health and Welfare Agency, Proposition 65 Chemicals

1 = known to cause cancer

2 = known to cause reproductive toxicity

NTP: National Toxicology Program

2A = known to be carcinogenic to humans

2B = reasonably anticipated to be carcinogenic to humans

IARC: International Agency on Research of Cancer

1 = carcinogenic to humans

3 = unclassifiable as to carcinogenicity to humans

2A = probably carcinogenic to humans

4 = probably not carcinogenic to humans

2B = possibly carcinogenic to humans

California Air Toxics

I = Substances identified as Toxic Air Contaminants, known to be emitted in California, with a full set of health values reviewed by the Scientific Review Panel.

IIA = Substances identified as Toxic Air Contaminants, known to be emitted in California, with one or more health values under development by the Office of Environmental Health Hazard Assessment for review by the Scientific Review Panel.

IIB= Substances NOT identified as Toxic Air Contaminants, known to be emitted in California, with one or more health values under development by the Office of Environmental Health Hazard Assessment for review by the Scientific Review Panel.

III = Substances known to be emitted in California and are NOMINATED for development of health values or additional health values.

IVA = Substance identified as Toxic Air Contaminants, known to be emitted in California and are TO BE EVALUATED for entry into Category III.

IVBA =Substance NOT identified as Toxic Air Contaminants, known to be emitted in California and are TO BE EVALUATED for entry into Category III.

V = Substance identified as Toxic Air Contaminants, and NOT KNOWN TO BE EMITTED from stationary source facilities in California based on information from the AB 2588 Air Toxic "Hot Spots" Program and the California Toxic Release Inventory.

VI = Substances identified as Toxic Air Contaminants, NOT KNOWN TO BE EMITTED from stationary source facilities in California and are active ingredients in pesticides in California.

CREL: California Office of Environmental Health's Hazard Assessment (OEHA), Chronic Reference Exposure Levels. The GREENGUARD program does not include all Chronic Reference Exposure Levels (CRELs) adopted by the State of California Office of Environmental Health Hazard Assessment (OEHA). For example, caprolactam and 2-butoxyethanol are not included.

✓ = Found in Listing

ACGIH TLV American Conference of Governmental Industrial Hygienists Threshold Limit Values for Chemical Substances and Physical Agents.

✓ = Found in Listing.

CHAIN OF CUSTODY

INTERNAL Use Only			
Project #	1002680343		
Product #	8350790		
Order #	 15781351		
Task Line	1.1	UL BU	
____ of ____ <i>100637559</i>			
☐ Rush Request – Subject to upcharge. Customer must confirm with UL prior to submitting product.			
GREENGUARD Test Information			
Test Type	☒ Certification Test • Annual/Initial Year <u>5</u>		☐ Out-of-Scope Test
	☐ Quarterly Test • Year <u>Quarter</u>		☐ Profile Study Test
Service Line	☒ GREENGUARD ☒ GREENGUARD GOLD		☐ Other _____
Test Group	Coatings - 01		
Product Category	Paints and Coatings	Subcategory	Paint
Application	☐ Floor/Ceiling ☐ Panel ☐ Wall ☐ Work Surface ☐ Other: _____		
Wet Products Only	Coverage Rate	Density	Specific Gravity
Product and Company Information			
Product Description	LIME WALL PAINT		
Manufacture ID#			
Company Name	KEIM Mineral Coatings of America, Inc	Date Manufactured	mm/dd/yyyy
Address		Contact Name	Roy Suttles
		Job Title	
		Contact Phone	
		Contact Email	roy.suttles@keim.com
Collection Information			
Collector Name		Date Collected	mm/dd/yyyy
Collector Phone		Time Collected	
Collector Signature		Collection Location	
Shipping Information			
Carrier	<i>Fed Ex</i>		
Shipper Name		Date Shipped	mm/dd/yyyy <i>6.25.25</i>
Shipper Phone		Time Shipped	
Shipper Signature		Air Bill #	<i>390374587550</i>
Sample Submitted to			
☐ UL Environment (Marietta) 2211 Newmarket Pkwy Suite 106 Marietta, GA 30067, USA	☐ UL Verification Services (Guangzhou) Building A1, 3F, Nansha Science and Technology Innovation Ctr. No. 25, South Huanshi Avenue, Nansha District, Guangzhou 511458, China	☐ UL International Italia S.r.l. ATTN: IAQ Laboratory Via Europa, 9 I – 22060 – Cabiato (Como), Italia	☐ UL VS (Vietnam) Co., Ltd. Lot C5, Conurbation 2, Street K1, Cat Lai Industrial Zone Thanh My Loi Ward, Thu Duc City Ho Chi Minh City, Vietnam
Post Testing Sample Disposition (Sample will be disposed of 30 days after report is issued if information below is not provided)			
Return Shipping Co.		Customer Shipping Acct #	
Internal Use Only – Receiving Information			
Receiver Name	<i>[Signature]</i>	Receiver Signature	<i>[Signature]</i>
Condition Upon Arrival	☒ Acceptable ☐ Not Acceptable	Receive Date	<i>6.26.25</i>
Condition Notes		Receive Time	<i>1300</i>

00-EN-F0853 – Issue 7.0

APPENDIX 1

GREENGUARD GOLD RESULTS SUMMARY

Product Description		Lime Wall Paint		
COMPLIANCE WITH GREENGUARD GOLD STANDARD				
GREENGUARD Gold Acceptable IAQ Criteria		168 Hour Predicted Concentration**		Product Compliance for IAQ
		Office	Classroom	
TVOC	≤ 0.22 mg/m³	0.037 mg/m³	0.012 mg/m³	Yes
Formaldehyde	≤ 0.0073 ppm	< 0.002 ppm	< 0.001 ppm	Yes
Total Aldehydes	≤ 0.043 ppm	0.002 ppm	0.001 ppm	Yes
1-Methyl-2-Pyrrolidinone	≤ 0.16 mg/m³	< 0.003 mg/m³	< 0.001 mg/m³	Yes
Individual VOCs	≤ 1/100 TLV and ≤ ½ chronic REL	See Below		

**Predicted Air Concentrations are based on GREENGUARD Gold modeling predicted concentration parameters.

TOP TEN MOST ABUNDANT IDENTIFIED VOCS, INCLUDING ALDEHYDES					
CAS Number	Compound	168 Hour Chamber Concentration (µg/m ³)	168 Hour Emission Factor (µg/m ² •hr)	Predicted Air Concentration** (µg/m ³)	
				Office	Classroom
71-36-3	1-Butanol (N-Butyl alcohol) [†]	13.7	12.7	20	6
124-19-6	Nonyl aldehyde (Nonanal) [†]	4.8	4.4	7	2
541-05-9	Cyclotrisiloxane, hexamethyl	4.0	3.7	6	2
124-13-0	Octanal [‡]	3.6	3.3	5	2
556-67-2	Cyclotetrasiloxane, octamethyl	3.2	3.0	5	1
1066-42-8	Silanediol, dimethyl-*	3.2	2.9	5	1
56114-69-3	Benzaldehyde, 2,5-bis[(trimethylsilyl)oxy]*	2.5	2.4	4	1
541-02-6	Cyclopentasiloxane, decamethyl	2.4	2.2	4	1

^aAmerican Conference of Governmental Industrial Hygienists. Threshold Limit Values for Chemical Substances and Physical Agents. Cincinnati, OH.

^bChronic Reference Exposure Levels (CRELs) adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA). Note that Gold assessment is only for the CDPH Table 4-1 CRELs, but other CRELs are included for informational purposes only. Also, not all OEHHA CRELs are pulled into this assessment. For example, caprolactam and 2-butoxyethanol are not included.

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

[‡]Indicates compound identified and quantified by DNPH derivitization and HPLC/UV analysis with multipoint authentic standard.

*Identification based on NIST mass spectral database only.

**Predicted Air Concentrations are based on modeling predicted concentration parameters shown [above](#).

CHEMICALS OF CONCERN WITH EXISTING TLV, CREL, CA PROP 65 OR CAL TOXIC AIR CONTAMINANT VALUES									
CAS Number	Compound	168 Hour Chamber Concentration (µg/m³)	168 Hour Emission Factor (µg/m²·hr)	168 Hour Predicted Concentration** (µg/m³)		✓ INDICATES PRESENCE ON LIST			
				Office	Classroom	CA PROP 65	CA TAC	CA CREL ^b	ACGIH TLV
71-36-3	1-Butanol (N-Butyl alcohol) [†]	13.7	12.7	20	6		✓(IVB)		✓

COMPARISON OF COMPOUNDS FOUND WITH EXISTING TLV AND/OR CHRONIC REL						
CAS Number	Compound	1/100 TLV ^a (µg/m³)	½ CA Chronic REL ^b (µg/m³)	168 Hour Predicted Concentration** (µg/m³)		Product Compliance
				Office	Classroom	
71-36-3	1-Butanol (N-Butyl alcohol)	610	---	20	6	Yes

^aAmerican Conference of Governmental Industrial Hygienists. Threshold Limit Values for Chemical Substances and Physical Agents. Cincinnati, OH.

^bChronic Reference Exposure Levels (CRELs) adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA). Note that Gold assessment is only for the CDPH Table 4-1 CRELs, but other CRELs are included for informational purposes only. Also, not all OEHHA CRELs are pulled into this assessment. For example, caprolactam and 2-butoxyethanol are not included.

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

[‡]Indicates compound identified and quantified by DNPH derivitization and HPLC/UV analysis with multipoint authentic standard.

*Identification based on NIST mass spectral database only.

**Predicted Air Concentrations are based on modeling predicted concentration parameters shown [above](#).