Date Issued: February 11, 2022
Product ID#: 1001421774-4553900
Test Report #: 1001421774-4553900R1

BCM2
Supersede Report #: 1001421774-4553900

GREENGUARD CERTIFICATION TEST REPORT

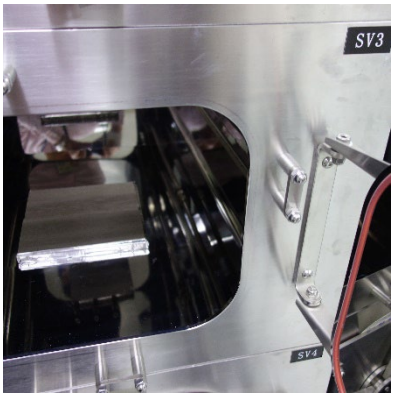
Customer Information	Zhejiang Hoy Technology Co., Ltd. Crane Yu Liuli Industrial Park , Ganpu Town Haiyan County Jiaxing City Zhejiang 314301 China				
Product Description	2.0-7.0mm Dry Back				
Test Group	Vinyl Flooring – 01 (LVT)				
Category	Flooring				
Test Type	Certification	Year 4			
Test Method	UL 2821 "GREENGUARD Certification Program Method for Measuring and Evaluating Chemical Emissions From Building Materials, Finishes and Furnishings Using Dynamic Environmental Chambers"				
	Environment	**TVOC**	**Formaldehyde**	**Total Aldehydes**	**CREL/TLV**
GREENGUARD	Office	✓	✓	✓	✓
GREENGUARD Gold	Office	✓	✓	✓	✓
	Classroom	✓	✓	✓	✓
✓ - meets criteria; X - over criteria					
Authorized by	Ring Zhong Laboratory Testing Supervisor				

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	floor	11.1	30.6	0.68
GREENGUARD Gold Classroom	CDPH/EHLB/Standard Method	floor	89.2	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	2.0-7.0mm Dry Back		
GREENGUARD Acceptable IAQ Criteria		**168 Hour Product Measurement**	**Product Compliance for IAQ**
TVOC[a]	≤ 0.5 mg/m³	0.065 mg/m³	Yes
Formaldehyde	≤ 0.05 ppm	< 0.002 ppm	Yes
Total Aldehydes[b]	≤ 0.10 ppm	< 0.002 ppm	Yes
4-Phenylcyclohexene	≤ 0.0065 mg/m³	< 0.003 mg/m³	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:

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	2.0-7.0mm Dry Back		
Product Manufacture Date	January 11, 2022		
Product Collection Date	January 11, 2022		
Product Shipping Date	January 11, 2022		
Date Received	January 18, 2022		
Test Description	The product was received by ULE Guangzhou Laboratory 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 prepared for the required loading to expose the finished surfaces only. The sample was placed inside the environmental chamber, and tested according to the specified protocol.		
Test Period	January 20, 2022 - January 27, 2022		
Area	one-sided area = 0.0369 m²		
Environmental Chamber ID and Volume	SV3 - 0.0891 m³		
Product Loading	0.41 m²/m³		
Test Conditions	1.00 ± 0.05 ACH 50% RH ± 5% RH 22.0ºC - 23.8ºC		
***Accredited Laboratory Locations**	**Testing Laboratory**	**Analytical Laboratory**	**Technical Reporting Location**
	ULE - Guangzhou	ULE - Guangzhou	ULE - Guangzhou

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) 1-3F & Room 501, Building 2 (R&D Center A1), No. 25, South Huanshi Avenue, Nansha District, Guangzhou 511458, China
ULE - Cabiate	UL International Italia S.r.l ATTN: IAQ Laboratory Via Europa, 9, I – 22060 – Cabiate (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
Servaco	Servaco Product Testing N.V. Boertang 200 2400 MOL Belgium

This test is accredited under the laboratory's ISO/IEC 17025 accreditation issued by International Accreditation Service. Refer to certificate and scope of accreditation TL-441.

This test report is for intended use in certification programs.

TABLE 2

Product Description	2.0-7.0mm Dry Back		
TVOC CHAMBER CONCENTRATIONS, EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS			
Elapsed Exposure Hour*	**Chamber Concentration µg/m³**	**Emission Factor µg/m²•hr**	**Predicted Air Concentration** µg/m³**
0 (Background)	BQL	BQL	---
6	254	613	327
24	140	339	181
48	116	281	126
72	82.7	200	102
96	65.1	157	88
168	50.0	121	65
Power Law Decay Constant = k_T = 0.526			

FORMALDEHYDE CHAMBER CONCENTRATIONS, EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS				
Elapsed Exposure Hour*	**Chamber Concentration µg/m³**	**Emission Factor µg/m²•hr**	**Predicted Air Concentration****	
			µg/m³	**ppm**
0 (Background)	BQL	BQL	---	---
6	BQL	BQL	< 3	< 0.002
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 µg/m³**	**Emission Factor µg/m²•hr**	**Predicted Air Concentration****	
			µg/m³	**ppm**
0 (Background)	BQL	BQL	---	---
6	9.9	24.0	13	0.004
24	5.7	13.8	7	0.002
48	2.5	6.2	3	< 0.002
72	BQL	BQL	< 3	< 0.002
96	BQL	BQL	< 3	< 0.002
168	BQL	BQL	< 3	< 0.002
Power Law Decay Constant = k_A = 1.154				

*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.

TABLE 3

Product Description	2.0-7.0mm Dry Back						
CHAMBER CONCENTRATIONS OF IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS							
CAS Number	**Compound**	**Elapsed Exposure Hour (µg/m³)**						
		0 (BG)	**6**	**24**	**48**	**72**	**96**	**168**
104-76-7	1-Hexanol, 2-ethyl†	BQL	186	118	101	76.0	58.9	44.2
98-86-2	Acetophenone (Ethanone, 1-phenyl)†	BQL	11.1	4.5	3.4	2.1		
103-09-3	Acetic acid, 2-ethylhexyl ester*	BQL	8.2	3.6	2.9			
5336-61-8	2,4-Nonanedione, 5-ethyl-*	BQL	7.6	6.1	6.1	5.2	4.8	4.2
617-94-7	Benzenemethanol, α,α-dimethyl-*	BQL	6.9	3.3	2.7			
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl*	BQL	6.5	2.4				
124-19-6	Nonyl aldehyde (Nonanal)†	BQL	5.9	3.3	2.5			
123-05-7	Hexanal, 2-ethyl	BQL	4.6					
108-94-1	Cyclohexanone	BQL	4.3					
25117-31-1	Tridecane, 5-methyl*	BQL	4.1					
13287-21-3	Tridecane, 6-methyl*	BQL	3.8					
98-83-9	α-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	BQL	3.5					
62016-14-2	Octane, 2,5,6-trimethyl*	BQL	2.8					
108-88-3	Toluene (Methylbenzene)†	BQL	2.8					
112-53-8	1-Dodecanol*	BQL	2.7	3.9	3.5	3.1	2.6	2.5
71-36-3	1-Butanol (N-Butyl alcohol)†	BQL	2.6					

TABLE 4

Product Description	2.0-7.0mm Dry Back						
EMISSION FACTORS OF IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS							
CAS Number	**Compound**	**Elapsed Exposure Hour (µg/m²•hr)**					
		6	**24**	**48**	**72**	**96**	**168**
104-76-7	1-Hexanol, 2-ethyl†	450	285	243	184	142	107
98-86-2	Acetophenone (Ethanone, 1-phenyl)†	26.8	10.9	8.3	5.1		
103-09-3	Acetic acid, 2-ethylhexyl ester*	19.8	8.6	7.0			
5336-61-8	2,4-Nonanedione, 5-ethyl-*	18.4	14.7	14.8	12.6	11.5	10.1
617-94-7	Benzenemethanol, α,α-dimethyl-*	16.6	8.0	6.6			
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl*	15.7	5.8				
124-19-6	Nonyl aldehyde (Nonanal)†	14.3	8.0	6.2			
123-05-7	Hexanal, 2-ethyl	11.0					
108-94-1	Cyclohexanone	10.5					

Product Description	2.0-7.0mm Dry Back

EMISSION FACTORS OF IDENTIFIED INDIVIDUAL VOLATILE ORGANIC COMPOUNDS

CAS Number	Compound	Elapsed Exposure Hour (µg/m²•hr)					
		6	24	48	72	96	168
25117-31-1	Tridecane, 5-methyl*	9.9					
13287-21-3	Tridecane, 6-methyl*	9.1					
98-83-9	α-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	8.5					
62016-14-2	Octane, 2,5,6-trimethyl*	6.8					
108-88-3	Toluene (Methylbenzene)†	6.8					
112-53-8	1-Dodecanol*	6.6	9.3	8.5	7.5	6.3	6.1
71-36-3	1-Butanol (N-Butyl alcohol)†	6.3					

*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.

TABLE 5

Product Description	2.0-7.0mm Dry Back

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	BQL	BQL	BQL	BQL	BQL	BQL
75-07-0	Acetaldehyde	BQL	4.0	2.4	BQL	BQL	BQL	BQL
100-52-7	Benzaldehyde	BQL	BQL	BQL	BQL	BQL	BQL	BQL
5779-94-2	Benzaldehyde, 2,5-dimethyl	BQL	BQL	BQL	BQL	BQL	BQL	BQL
529-20-4	Benzaldehyde, 2-methyl	BQL	BQL	BQL	BQL	BQL	BQL	BQL
620-23-5 /104-87-0	Benzaldehyde, 3- and/or 4-methyl	BQL	BQL	BQL	BQL	BQL	BQL	BQL
123-72-8	Butanal	BQL	BQL	BQL	BQL	BQL	BQL	BQL
590-86-3	Butanal, 3-methyl	BQL	BQL	BQL	BQL	BQL	BQL	BQL
50-00-0	Formaldehyde	BQL	BQL	BQL	BQL	BQL	BQL	BQL
66-25-1	Hexanal	BQL	BQL	BQL	BQL	BQL	BQL	BQL
110-62-3	Pentanal	BQL	BQL	BQL	BQL	BQL	BQL	BQL
123-38-6	Propanal	BQL	BQL	BQL	BQL	BQL	BQL	BQL

TABLE 6

Product Description	2.0-7.0mm Dry Back

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	BQL	BQL	BQL	BQL	BQL	BQL
75-07-0	Acetaldehyde	9.7	5.8	BQL	BQL	BQL	BQL
100-52-7	Benzaldehyde	BQL	BQL	BQL	BQL	BQL	BQL
5779-94-2	Benzaldehyde, 2,5-dimethyl	BQL	BQL	BQL	BQL	BQL	BQL
529-20-4	Benzaldehyde, 2-methyl	BQL	BQL	BQL	BQL	BQL	BQL
620-23-5 /104-87-0	Benzaldehyde, 3- and/or 4-methyl	BQL	BQL	BQL	BQL	BQL	BQL
123-72-8	Butanal	BQL	BQL	BQL	BQL	BQL	BQL
590-86-3	Butanal, 3-methyl	BQL	BQL	BQL	BQL	BQL	BQL
50-00-0	Formaldehyde	BQL	BQL	BQL	BQL	BQL	BQL
66-25-1	Hexanal	BQL	BQL	BQL	BQL	BQL	BQL
110-62-3	Pentanal	BQL	BQL	BQL	BQL	BQL	BQL
123-38-6	Propanal	BQL	BQL	BQL	BQL	BQL	BQL

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

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	2.0-7.0mm Dry Back						
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)		✓
75-07-0	Acetaldehyde	✓(1)	✓(2B)	✓(2B)	✓(IIA)	✓	✓
98-86-2	Acetophenone (Ethanone, 1-phenyl)†				✓(IVA)		✓
108-94-1	Cyclohexanone			✓(3)			✓
108-88-3	Toluene (Methylbenzene)	✓(2)		✓(3)	✓(IIA)	✓	✓
98-83-9	α-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	✓(1)					✓

†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
2A = probably carcinogenic to humans
2B = possibly carcinogenic to humans
3 = unclassifiable as to carcinogenicity to humans
4 = probably not 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 (OEHHA), Chronic Reference Exposure Levels
✓ = 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

4F112 471 943 3993

9158

INTERNAL Use Only			
Project #	1001421774		
Product #	4553900		
Order #	14166645		
Task Line	2.1	UI BU	VV VS
____ of ____			

4553900

4553900

Description: 2.0-7.0mm Dry Back

Customer: Zhejiang Hoy Technology Co. Lt
Received Date: 2022-JAN-18 18:58:25
Aurora Project No.: 1001421774
Order No.: 14166645
Oracle Project No.: 4780257634

1 of 1

☐ *Rush Request – Subject to upcharge. Customer must confirm with UL prior to submitting product.*

GREENGUARD Test Information

Test Type	☒ Certification Test • Annual/Initial Year 4	☐ Out-of-Scope Test
	☐ Quarterly Test • Year Quarter	☐ Profile Study Test
Service Line	☒ GREENGUARD ☒ GREENGUARD GOLD ☐ Other	
Test Group	Vinyl Flooring - 01(LVT)	
Product Category	Flooring	Subcategory: Resilient
Application	☐ Floor/Ceiling ☐ Panel ☐ Wall ☐ Work Surface ☐ Other:	
Wet Products Only	Coverage Rate	Density / Specific Gravity

Product and Company Information

Product Description	2.0-7.0mm Dry Back		
Manufacture ID#			
Company Name	Zhejiang Hoy technology Co.,Ltd.	Date Manufactured mm/dd/yyyy	01/11/2022
		Contact Name	Crane Yu
Address		Job Title	
		Contact Phone	13777068829
		Contact Email	swallow <247360469@qq.com>

Collection Information

Collector Name		Date Collected mm/dd/yyyy	01/11/2022
Collector Phone		Time Collected	
Collector Signature		Collection Location	

Shipping Information

Carrier			
Shipper Name		Date Shipped mm/dd/yyyy	01/11/2022
Shipper Phone		Time Shipped	
Shipper Signature		Air Bill #	

Sample Submitted to

☐ UL Environment (Marietta) 2211 Newmarket Pkwy Suite 126 Marietta, GA 30067 USA	☐ UL Verification Services (Guangzhou) Building A1 3F, Nansha Software and Technology Innovation Ctr. No. 25 South Huanshi Avenue Nansha District, Guangzhou, 511458, China	☐ UL International Italia S.r.l ATTN: DAQ (Quality) Via Europa, 8 I – 22030 – Cavaria (Como), Italy	☐ UL VS (Vietnam) Co., Ltd. Lot C9, Conurbation 2, Street 41, Can La Industrial Zone Thanh Vy Lot Ward, District 7 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		Receiver Signature	AW
Condition Upon Arrival	☑ Acceptable ☐ Not Acceptable	Receive Date	2022-1-18
Condition Notes		Receive Time	14:40
Completed By	LLC	Based On	Program Testing Schedule
		Date	10/09/2021

APPENDIX 1
GREENGUARD GOLD RESULTS SUMMARY

Product Description	2.0-7.0mm Dry Back

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**	0.064 mg/m³	0.057 mg/m³	Yes
Formaldehyde	**≤ 0.0073 ppm**	< 0.002 ppm	< 0.002 ppm	Yes
Total Aldehydes	**≤ 0.043 ppm**	< 0.002 ppm	< 0.002 ppm	Yes
1-Methyl-2-Pyrrolidinone	**≤ 0.16 mg/m³**	< 0.003 mg/m³	< 0.002 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/m³)	168 Hour Emission Factor (µg/m²•hr)	Predicted Air Concentration** (µg/m³)	
				Office	Classroom
104-76-7	1-Hexanol, 2-ethyl†	44.2	107	57	50
5336-61-8	2,4-Nonanedione, 5-ethyl-*	4.2	10.1	5	5
112-53-8	1-Dodecanol*	2.5	6.1	3	3

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	ACGIH TLV
---	none	---	---	---	---	---	---	---	---

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	
---	none	---	---	---	---	---

[a]American Conference of Governmental Industrial Hygienists. Threshold Limit Values for Chemical Substances and Physical Agents. Cincinnati, OH: ACGIH.

[b]Chronic Reference Exposure Levels (CRELs) adopted by the State of California Office of Environmental Health Hazard Assessment (OEHHA).

†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.