



November 12, 2024

Schluter Systems
Attn: Kali Pharand
194 Pleasant Ridge Rd.
Plattsburgh, NY 12901
USA

Dear Kali Pharand,

The sample you identified as “KERDI-BOARD” was tested per CA 01350 VOC Emissions & SCAQMD Rule 1168 VOC Content per your request (IPAL Test Report: IPAL-0092-24). The testing was performed by Research Triangle Park (RTP) Laboratories in Raleigh, NC. All comments, findings, and interpretations within this report were made by RTP Laboratories.

Testing was conducted on the sample submitted for emissions of total volatile organic compounds (TVOC), aldehydes, formaldehyde, and specific individual volatile organic compounds (VOCs). Any emissions were measured and the resultant emissions to the environment were determined for each of the potential pollutants.

The attached report includes the detailed test results.

Green Building Standard, Rating System, or Code	Criteria	Results
LEED V4.1	<p>Credit: Low-Emitting Materials, Flooring</p> <p>At least 90% of all flooring, by cost or surface area, meets the VOC emissions evaluation:</p> <ul style="list-style-type: none">Product has been tested according to CDPH Standard Method v1.2 – 2017 and complies with the VOC limits in Table 4-1 of the method: Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde)The range of total VOCs after 14 days was measured as specified in the CDPH Standard Method v1.2 and is reported (TVOC ranges: 0.5 mg/m³ or less, between 0.5 and 5 mg/m³, or 5 mg/m³ or more).	<p>2.1µg/m³ (classroom model) and 2.6 µg/m³ (office model) Styrene detected, CDPH Table 4-1 max for Styrene=½(450µg/m³) =224µg/m³</p> <p>0.002mg/m³ detected (≤0.5mg/m³)</p>



IgCC (ASHRAE 189.1) 2021	Section 801.4.2.3 (8.4.2.3) Emissions of floor covering materials installed in the building interior, and each product layer within a flooring system containing more than one distinct product layer, shall be individually determined according to CDPH Standard Method and shall comply with the limit requirements: Table 4-1 Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde)	2.1 µg/m ³ (classroom model) and 2.6 µg/m ³ (office model) Styrene detected, CDPH Table 4-1 max for Styrene = $\frac{1}{2}(450 \mu\text{g}/\text{m}^3) = 224 \mu\text{g}/\text{m}^3$
CHPS (U.S.) 2020	EQ C6.1.2 Flooring Systems All flooring systems installed in the project's interior totaling 90% or more of the total floor area shall be tested for emissions of VOCs of concern with respect to chronic inhalation exposures following the specifications of the CDPH Standard Method V1.2, 2017 (CDPH Standard Method): Table 4-1 Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde)	2.1 µg/m ³ (classroom model) and 2.6 µg/m ³ (office model) Styrene detected, CDPH Table 4-1 max for Styrene = $\frac{1}{2}(450 \mu\text{g}/\text{m}^3) = 224 \mu\text{g}/\text{m}^3$
WELL v2	X06 VOC Restrictions Flooring. 90% of cost or surface area tested per methods and VOC emission thresholds established in CDPH Standard Method v1.2: Table 4-1 Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde)	2.1 µg/m ³ (classroom model) and 2.6 µg/m ³ (office model) Styrene detected, CDPH Table 4-1 max for Styrene = $\frac{1}{2}(450 \mu\text{g}/\text{m}^3) = 224 \mu\text{g}/\text{m}^3$
BREEAM	Hea 02 Criterion 10 Flooring materials, $\leq 0.06 \text{ mg}/\text{m}^3$ formaldehyde, $\leq 1.0 \text{ mg}/\text{m}^3$ TVOCs, per CDPH Standard Method	No formaldehyde Detected 0.002 mg/m ³ TVOC detected
Living Building Challenge 4.1	Imperative 10 Healthy Interior Performance Install products that comply with emissions limits of the CDPH Standard Method v1.2-2017 (or international equivalent) for 90% of interior building products that have the potential to emit volatile organic compounds (VOCs): Table 4-1 Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde)	2.1 µg/m ³ (classroom model) and 2.6 µg/m ³ (office model) Styrene detected, CDPH Table 4-1 max for Styrene = $\frac{1}{2}(450 \mu\text{g}/\text{m}^3) = 224 \mu\text{g}/\text{m}^3$



Additional testing requested:

Reference Standard	Requirement	Results
SCAQMD Rule 1168	No requirement, per SCAQMD Rule 1168 or any of the above green building standards, rating systems, or codes	0.9% VOCs 99.1% Solids 0% Water VOCs (g/L) = $\left(\frac{100 - 99.1 - 0}{\left(\frac{100}{0.99}\right) - \left(\frac{0}{0.997}\right)} \right) 1000 = 8.9 \text{ g/L}$

The following is an image of the sample submitted for testing.

SAMPLE PHOTO



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11/12/2024

Katelyn Simpson
Director of Laboratory Service

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919 510-0228 Telephone
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ISO 17025 Compliant
PA Registration #68-1664
DEA Registered

March 11, 2024

International Product Assurance Laboratories
100 Clemson Research Boulevard
Anderson, SC 29625

Attn: Ashley Moore

PROJECT: VOCs Testing –Report of VOC Chamber Tests.

Purchase Order: 4628

RTP Labs ID: 24-006-04 Kerdi-Board

Enclosed with this letter is the report for the sample received on February 12, 2024 in good condition. The manufacturing date is listed on the COC form. The sample was tested for VOCs emissions according to ASTM D5116 Small Chamber Test and California Specification 01350 Test Methods. In addition, the sample was also tested for VOCs by EPA Methods 24 and TO-15 GC/MS for VOCs identification. The sample were prepared according to the sample preparation descriptions as described in CA 01350 and EPA Method 24. The chamber testing was started on February 15, 2024 with a 10-day conditioning period, followed by a 96-hour test as described in CA 01350.

The test results are summarized in the attached document. The testing method reporting limits are 0.001 mg/m³ using the California Standard Classroom Model.

EPA Method 24 VOCs analysis was performed and the results are included in the table below.

EPA Method 24 VOCs

Sample ID	Sample Description	VOCs %	Solids %
24-006-04	Kerdi-Board	0.9 %	99.1 %

If you have any questions, please give me a call at (919) 510-0228.

Sincerely,

Alston Sykes, Principal Chemist
Attachments: attachments and photos



EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianrws\wsdatafiles\voc-02-20-24_entech\24-006-04.SMS

Acquisition Date: 2/28/2024 11:31

Comment: Tile Council, 0092-24; Kerdi-board hdsp, 1.1 gm; 25mL; DF=10

CAS NO.	COMPOUND	CONCENTRATION	UNITS	MDL and Reporting Limit
75-71-8	Dichlorodifluoromethane (Freon 12)	Not Found	ppbv	1
76-14-2	1,2-Chloro-1,1,2,2-Tetrafluoroethane	Not Found	ppbv	1
74-87-3	Chloromethane	Not Found	ppbv	1
75-01-4	Vinyl chloride	Not Found	ppbv	1
106-99-0	1,3-Butadiene	Not Found	ppbv	1
74-83-9	Bromomethane	Below MDL	ppbv	1
75-00-3	Chloroethane	2.31	ppbv	1
75-69-4	Trichloromonofluoromethane	Not Found	ppbv	1
75-35-4	1,1-dichloroethene	Not Found	ppbv	1
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane	Below MDL	ppbv	1
75-15-0	Carbon disulfide	Below MDL	ppbv	1
67-63-0	Isopropyl alcohol	45.84	ppbv	1
75-09-2	Methylene chloride	2.90	ppbv	1
67-64-1	Acetone	26.17	ppbv	1
156-60-5	t-1,2-dichloroethene	Not Found	ppbv	1
11-05-3	Hexane	5.77	ppbv	1
1634-04-4	Methyl-t-butyl ether (MTBE)	Not Found	ppbv	1
75-34-3	1,1-Dichloroethane	Not Found	ppbv	1
108-05-4	Vinyl acetate	2.19	ppbv	1
156-59-2	cis-1,2-dichloroethene	Not Found	ppbv	1
110-82-7	Cyclohexane	Not Found	ppbv	1
67-66-3	Chloroform	Not Found	ppbv	1
141-78-6	Ethyl Acetate	6.09	ppbv	1
109-99-9	Tetrahydrofuran	2.36	ppbv	1
71-55-6	1,1,1-trichloroethane	Below MDL	ppbv	1
56-23-5	Carbon Tetrachloride	Not Found	ppbv	1
78-93-3	2-Butanone	2.25	ppbv	1
142-82-5	Heptane	Not Found	ppbv	1
71-43-2	Benzene	1.58	ppbv	1
107-06-2	1,2-dichloroethane	Not Found	ppbv	1
79-01-6	Trichloroethylene	Below MDL	ppbv	1
78-87-5	1,2-dichloropropane	Not Found	ppbv	1
75-27-4	Bromodichloromethane	Not Found	ppbv	1
123-91-1	1,4-dioxane	Not Found	ppbv	1
10061-01-5	cis-1,3-dichloropropene	Not Found	ppbv	1
108-88-3	Toluene	1.71	ppbv	1
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Found	ppbv	1
1006-02-6	t-1,3-dichloropropene	Not Found	ppbv	1
127-18-4	Tetrachloroethylene	Below MDL	ppbv	1
79-00-5	1,1,2-trichloroethane	Not Found	ppbv	1
124-48-1	Dibromochloromethane	Not Found	ppbv	1
106-93-4	1,2-dibromoethane	Not Found	ppbv	1
591-78-6	2-Hexanone	Not Found	ppbv	1
100-41-4	Ethylbenzene	3.45	ppbv	1
108-90-7	Chlorobenzene	Not Found	ppbv	1
1330-20-7	m/p-Xylene	Below MDL	ppbv	1
95-47-6	o-Xylene	Not Found	ppbv	1
100-42-5	Styrene	186.78	ppbv	1
75-25-2	Tribromomethane	Not Found	ppbv	1
79-34-5	1,1,2,2-tetrachloroethane	Not Found	ppbv	1
622-96-8	1-ethyl-4-methylbenzene	Not Found	ppbv	1
108-67-8	1,3,5-trimethylbenzene	Not Found	ppbv	1
95-63-6	1,2,4-trimethylbenzene	Not Found	ppbv	1
541-73-1	1,3-dichlorobenzene	Not Found	ppbv	1
106-46-7	1,4-dichlorobenzene	Not Found	ppbv	1
100-44-7	Benzyl chloride	Not Found	ppbv	1
95-50-1	1,2-dichlorobenzene	Not Found	ppbv	1
87-68-3	1,1,2,3,4,4-hexachloro-1,3-butadiene	Not Found	ppbv	1
120-82-1	1,2,4-trichlorobenzene	Not Found	ppbv	1

TENTATIVELY IDENTIFIED COMPOUNDS**EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS****Data File:** c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-04.SMS**Acquisition Date:** 2/28/2024 11:31**Comment:** Tile Council, 0092-24; Kerdi-board hdsp, 1.1 gm; 25mL; DF=10

CAS NO.	COMPOUND NAME	Retention Time	Estimated Concentration, Units	
115-07-1	Propene	4.02	15.75	ppbv
115-07-1	Propene	4.06	17.30	ppbv
115-07-1	Propene	4.08	13.49	ppbv
151-18-8	3-Aminopropionitrile	4.11	30.61	ppbv
108-03-2	Propane, 1-nitro-	4.42	9.37	ppbv
151-18-8	3-Aminopropionitrile	5.41	22.93	ppbv
186205-18-5	Di(1,2,5-oxadiazolo)[3,4-b:3,4-E]pyrazin	5.64	8.24	ppbv
513-36-0	Propane, 1-chloro-2-methyl-	6.04	8.88	ppbv
120-92-3	Cyclopentanone	11.67	17.94	ppbv
3396-11-0	Acetic acid, cesium salt	12.86	42.02	ppbv
None	Oxalic acid, cyclohexylmethyl isohexyl e	14.86	14.27	ppbv
3728-54-9	Cyclohexane, 1-ethyl-2-methyl-	15.34	14.07	ppbv
98-82-8	Benzene, (1-methylethyl)-	15.42	9.34	ppbv
821-74-9	4,5-Nonadiene	15.67	14.40	ppbv
1678-91-7	Cyclohexane, ethyl-	15.82	27.52	ppbv
2206-23-7	3-Penten-1-yne	15.93	12.07	ppbv
74810-83-6	Benzene, 2-methoxy-1-(2-nitroethenyl)-3-	16.08	8.50	ppbv
2890-67-7	Cyclohexanemethyl propanoate	16.32	14.40	ppbv
36566-80-0	3-Hexyne, 2-methyl-	16.50	7.35	ppbv
13325-10-5	4-Amino-1-butanol	16.73	27.45	ppbv
5857-36-3	2,2,4-Trimethyl-3-pentanone	17.04	8.81	ppbv
36566-80-0	3-Hexyne, 2-methyl-	17.25	10.90	ppbv
7423-69-0	1-Hexene, 3,5-dimethyl-	17.31	8.90	ppbv
None	4-Methyl-2,4-bis(4'-trimethylsilyloxy)phe	17.67	9.36	ppbv
79-92-5	Camphene	17.81	18.85	ppbv
22104-79-6	2-Nonen-1-ol	18.78	11.47	ppbv
78-77-3	Propane, 1-bromo-2-methyl-	19.00	11.68	ppbv
None	1,3-Dioxolane, 2-(3-bromo-5,5,5-trichlor	19.87	12.74	ppbv
None	Oxalic acid, isobutyl nonyl ester	20.75	23.95	ppbv
770-35-4	1-Phenoxypropan-2-ol	21.28	14.53	ppbv
77572-68-0	Butanal, 3,3-dimethyl-2-oxo-, hemihydrat	22.34	17.72	ppbv
52078-56-5	11-Tricosene	22.60	7.02	ppbv
52078-56-5	11-Tricosene	22.73	15.25	ppbv
19780-79-1	2-Hexyl-1-octanol	22.87	11.24	ppbv

(IS) is BFB Internal Standard and (SS) are Surrogate Standards that are added to each sample.

3/6/2024 16:23

Page 1 of 1

CLP TIC

24-006-04.SMS



0092-24



Chain of Custody Form

For Testing of Product/Material per CA DHS Section 01350

Please fill out a separate chain of custody form for each product tested

General Information (Section A)		
Section A	Manufacturer Name: Schluter Systems	
	Street Address: 194 Pleasant Ridge Road	
	City/State: Plattsburgh, NY	
	Zip/Postal Code: 12901	
	Country: United States	
	Contact Name: Kali Pharand	
	Contact Title: Product Standards and Sustainability Coordinator	
Phone/Fax Numbers: 888-472-4588 x 4152		
Email Address: sustainability@schluter.com		
Sampling Information (Section B)		
Section B	Product Name: BOARD	
	Manufacturer Product ID #: KB 15 1220 2440	
	Sample ID # (Same as TCNA Test Report #): KERDI - BOARD	
	Product Category: FOAM BOARD	
	Product Subcategory:	
	Date Manufactured: NOV '23	
	Plant Name and Location: PLATTSBURGH, NY	
	Date and Time Sample Collected from Plant: 1/31/24	
	Collection Location within Plant: SAMPLES	
	Number of Sample Pieces Collected (Attach Photos): 4	
Sample Collected by: SHAMIM MONDAL	Signature: Shamim Mondal	
Sample Packaged and Shipped to TCNA By: SHAMIM MONDAL	Signature: Shamim Mondal	
Shipping Date: 2/1/24		
Carrier/Airbill Number: UPS		
TCNA Receipt Information (Section C)		
Section C	Arrival to: Tile Council of North America, Inc. 100 Clemson Research Boulevard Anderson, SC 29625	
	Receipt Date: 2.9.2024	
	Received By: Ashley Moore	Signature: am
	Logged into TCNA Database by: Ashley Moore	
	TCNA Test Report #: 0092-24	
	Shipment Forwarded To RTP Laboratories By: Ashley Moore	Signature: amr
	Shipment Date: 2.9.2024	
Carrier/Airbill Number: UPS		
RTP Laboratories Receipt Information (Section D)		
Section D	Arrival to: Research Triangle Park Laboratories, Inc. 7201 ACC Blvd., Suite 104 Raleigh, NC 27617	
	Receipt Date: 2-12-24	
	Received By: Alston Sykes	Signature: A. Sykes
	Condition of Shipping Package: Good	
	Condition of Sample: Good	
	Laboratory ID #: 24-006-04	

Research Triangle Park Laboratories, Inc.

7201 ACC Blvd., Suite 104
Raleigh, NC 27617

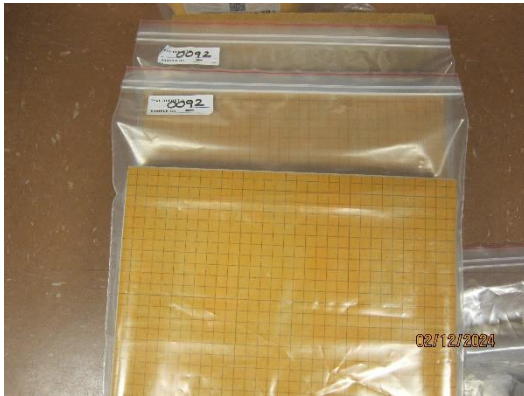
919 510-0228 Telephone
919 510-0141 Fax

Web Site: www.rtp-labs.com



ISO 17025 Compliant
PA Registration #68-1664
DEA Registered

Photo of Sample Received Feb. 12, 2024:
24-006-04 (IPAL-0092-24) Kerdi-Board



Research Triangle Park Laboratories Inc, 7201 ACC Blvd., Raleigh, NC 27617

California 01350/ASTM D5116 Small Chamber Tests for Volatile Organic Compound Emissions From Products

Project ID: 24-006-04

Client: Tile Council of North America

Sample Receipt Date: Feb. 12, 2024

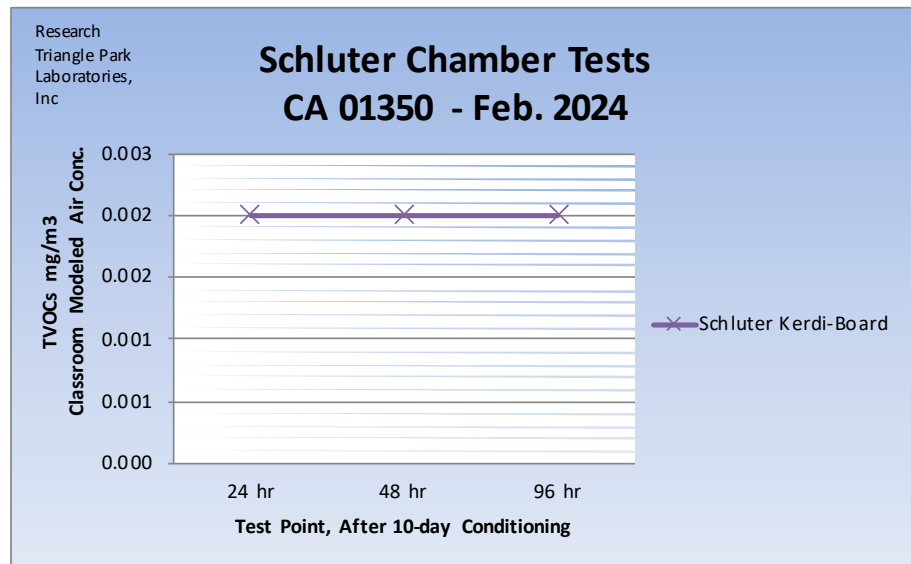
Test Start Dates: Feb. 15, 2024

Products:

Schluter Kerdi-Board

Modeled Standard Classroom Concentration, mg/m³

24 hr	48 hr	96 hr	LOQ
0.002	0.002	0.002	0.001



Standard Classroom Model Parameters:

Room Dimensions: 40 ft length x 24 ft wide x 8.5 ft ht

Room Volume: 231 m³

Ventilation Rate: 0.90 air changes per hour

Net Floor Surface: 89.2 m²

Chamber and Sample Conditions:

Chamber Volume: 50 Liters

Temperature: 20-25 C; Relative Humidity: 45-55 %

Air Exchange Rate: 1 per hour (0.833L/min = 50 liters)

Sample Surface Area: 0.0232 m²

Sample Loading Factor: 0.5 m²/m³

Sample Receipt Date: 2/12/2024
 Project ID: 24-006-04
 Sample ID: Schluter Kerdi-Board 5/8" (IPAL-0092-24)
 Client: IPA Labs

Test Start Date: 2/15/2024

10 day conditioning performed prior to 96 h testing.

Standard Classroom Parameters
 Room Dimensions, ft 40x24x8.5

ASTM D5116 Small Chamber Method

Room Volume, m3 231
 Ventilation Rate, ach 0.9
 Net Surface Area, m2 89.2

California Specification 01350
 Paints and Wallcoverings Model: 94.6 m2
 Flooring Products Model: 89.2 m2

Compound Name	Emission Factors (ug/(m2*h))						Cm	Cm	Cm	1/2 CREL 12/2008 (A)Acute (C)Chronic
	02/16/24 24 hr Chamber Conc. ug/m3	24 hr EF	02/17/24 48 hr Chamber Conc. ug/m3	48 hr EF	02/29/24 96 hr Chamber Conc. ug/m3	96 hr EF	Classroom: 24 hr Modeled Air Conc. ug/m3	Classroom: 48 hr Modeled Air Conc. ug/m3	Classroom: 96 hr Modeled Air Conc. ug/m3	
<u>GC/MS Target, LOQ 2 ng/L (ug/m3)</u>										
Styrene	11.8	9.6	11	9.0	11.8	9.6	2.1	1.9	2.1	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
<u>GC/MS TICs, LOQ 5 ng/L (ug/m3)</u>										
None Dectected	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0	
<u>HPLC Aldehydes, LOQ 2 ng/L (ug/m3)</u>										
Formaldehyde	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	4.5 C
Acetaldehyde	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	70 C
TVOCs LOQ 25 ng/L (ug/m3) Use 1 for < value	11.8	9.6	11.0	9.0	11.8	9.6	2.1	1.9	2.1	ug/m3
							0.002	0.002	0.002	mg/m3

Reporting Limit, 0.001 mg/m3

October 24, 2024

International Product Assurance Laboratories
100 Clemson Research Boulevard
Anderson, SC 29625

Attn: Ashley Moore

PROJECT: VOCs Testing –Report of VOC Chamber Tests. Updated with Office Model
Purchase Order: 4628
RTP Labs ID: 24-006-04 Kerdi-Board

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The test results are summarized in the attached document. The testing method reporting limits are 0.001 mg/m³ using the California Standard Office Model.

EPA Method 24 VOCs analysis was performed and the results are included in the table below.

EPA Method 24 VOCs

Sample ID	Sample Description	VOCs %	Solids %
24-006-04	Kerdi-Board	0.9 %	99.1 %

If you have any questions, please give me a call at (919) 510-0228.

Sincerely,

A handwritten signature in blue ink that reads 'Alston Sykes'.

Alston Sykes, Principal Chemist
Attachments: attachments and photos



EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianrws\wsdatafiles\voc-02-20-24_entech\24-006-04.SMS

Acquisition Date: 2/28/2024 11:31

Comment: Tile Council, 0092-24; Kerdi-board hdsp, 1.1 gm; 25mL; DF=10

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75-71-8	Dichlorodifluoromethane (Freon 12)	Not Found	ppbv	1
76-14-2	1,2-Chloro-1,1,2,2-Tetrafluoroethane	Not Found	ppbv	1
74-87-3	Chloromethane	Not Found	ppbv	1
75-01-4	Vinyl chloride	Not Found	ppbv	1
106-99-0	1,3-Butadiene	Not Found	ppbv	1
74-83-9	Bromomethane	Below MDL	ppbv	1
75-00-3	Chloroethane	2.31	ppbv	1
75-69-4	Trichloromonofluoromethane	Not Found	ppbv	1
75-35-4	1,1-dichloroethene	Not Found	ppbv	1
76-13-1	1,1,2-trichloro-1,2,2-trifluoroethane	Below MDL	ppbv	1
75-15-0	Carbon disulfide	Below MDL	ppbv	1
67-63-0	Isopropyl alcohol	45.84	ppbv	1
75-09-2	Methylene chloride	2.90	ppbv	1
67-64-1	Acetone	26.17	ppbv	1
156-60-5	t-1,2-dichloroethene	Not Found	ppbv	1
11-05-3	Hexane	5.77	ppbv	1
1634-04-4	Methyl-t-butyl ether (MTBE)	Not Found	ppbv	1
75-34-3	1,1-Dichloroethane	Not Found	ppbv	1
108-05-4	Vinyl acetate	2.19	ppbv	1
156-59-2	cis-1,2-dichloroethene	Not Found	ppbv	1
110-82-7	Cyclohexane	Not Found	ppbv	1
67-66-3	Chloroform	Not Found	ppbv	1
141-78-6	Ethyl Acetate	6.09	ppbv	1
109-99-9	Tetrahydrofuran	2.36	ppbv	1
71-55-6	1,1,1-trichloroethane	Below MDL	ppbv	1
56-23-5	Carbon Tetrachloride	Not Found	ppbv	1
78-93-3	2-Butanone	2.25	ppbv	1
142-82-5	Heptane	Not Found	ppbv	1
71-43-2	Benzene	1.58	ppbv	1
107-06-2	1,2-dichloroethane	Not Found	ppbv	1
79-01-6	Trichloroethylene	Below MDL	ppbv	1
78-87-5	1,2-dichloropropane	Not Found	ppbv	1
75-27-4	Bromodichloromethane	Not Found	ppbv	1
123-91-1	1,4-dioxane	Not Found	ppbv	1
10061-01-5	cis-1,3-dichloropropene	Not Found	ppbv	1
108-88-3	Toluene	1.71	ppbv	1
108-10-1	4-Methyl-2-pentanone (MIBK)	Not Found	ppbv	1
1006-02-6	t-1,3-dichloropropene	Not Found	ppbv	1
127-18-4	Tetrachloroethylene	Below MDL	ppbv	1
79-00-5	1,1,2-trichloroethane	Not Found	ppbv	1
124-48-1	Dibromochloromethane	Not Found	ppbv	1
106-93-4	1,2-dibromoethane	Not Found	ppbv	1
591-78-6	2-Hexanone	Not Found	ppbv	1
100-41-4	Ethylbenzene	3.45	ppbv	1
108-90-7	Chlorobenzene	Not Found	ppbv	1
1330-20-7	m/p-Xylene	Below MDL	ppbv	1
95-47-6	o-Xylene	Not Found	ppbv	1
100-42-5	Styrene	186.78	ppbv	1
75-25-2	Tribromomethane	Not Found	ppbv	1
79-34-5	1,1,2,2-tetrachloroethane	Not Found	ppbv	1
622-96-8	1-ethyl-4-methylbenzene	Not Found	ppbv	1
108-67-8	1,3,5-trimethylbenzene	Not Found	ppbv	1
95-63-6	1,2,4-trimethylbenzene	Not Found	ppbv	1
541-73-1	1,3-dichlorobenzene	Not Found	ppbv	1
106-46-7	1,4-dichlorobenzene	Not Found	ppbv	1
100-44-7	Benzyl chloride	Not Found	ppbv	1
95-50-1	1,2-dichlorobenzene	Not Found	ppbv	1
87-68-3	1,1,2,3,4,4-hexachloro-1,3-butadiene	Not Found	ppbv	1
120-82-1	1,2,4-trichlorobenzene	Not Found	ppbv	1

TENTATIVELY IDENTIFIED COMPOUNDS**EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS**

Data File: c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-04.SMS

Acquisition Date: 2/28/2024 11:31

Comment: Tile Council, 0092-24; Kerdi-board hdsp, 1.1 gm; 25mL; DF=10

CAS NO.	COMPOUND NAME	Retention Time	Estimated Concentration, Units	
115-07-1	Propene	4.02	15.75	ppbv
115-07-1	Propene	4.06	17.30	ppbv
115-07-1	Propene	4.08	13.49	ppbv
151-18-8	3-Aminopropionitrile	4.11	30.61	ppbv
108-03-2	Propane, 1-nitro-	4.42	9.37	ppbv
151-18-8	3-Aminopropionitrile	5.41	22.93	ppbv
186205-18-5	Di(1,2,5-oxadiazolo)[3,4-b:3,4-E]pyrazin	5.64	8.24	ppbv
513-36-0	Propane, 1-chloro-2-methyl-	6.04	8.88	ppbv
120-92-3	Cyclopentanone	11.67	17.94	ppbv
3396-11-0	Acetic acid, cesium salt	12.86	42.02	ppbv
None	Oxalic acid, cyclohexylmethyl isohexyl e	14.86	14.27	ppbv
3728-54-9	Cyclohexane, 1-ethyl-2-methyl-	15.34	14.07	ppbv
98-82-8	Benzene, (1-methylethyl)-	15.42	9.34	ppbv
821-74-9	4,5-Nonadiene	15.67	14.40	ppbv
1678-91-7	Cyclohexane, ethyl-	15.82	27.52	ppbv
2206-23-7	3-Penten-1-yne	15.93	12.07	ppbv
74810-83-6	Benzene, 2-methoxy-1-(2-nitroethenyl)-3-	16.08	8.50	ppbv
2890-67-7	Cyclohexanemethyl propanoate	16.32	14.40	ppbv
36566-80-0	3-Hexyne, 2-methyl-	16.50	7.35	ppbv
13325-10-5	4-Amino-1-butanol	16.73	27.45	ppbv
5857-36-3	2,2,4-Trimethyl-3-pentanone	17.04	8.81	ppbv
36566-80-0	3-Hexyne, 2-methyl-	17.25	10.90	ppbv
7423-69-0	1-Hexene, 3,5-dimethyl-	17.31	8.90	ppbv
None	4-Methyl-2,4-bis(4'-trimethylsilyloxy)phe	17.67	9.36	ppbv
79-92-5	Camphene	17.81	18.85	ppbv
22104-79-6	2-Nonen-1-ol	18.78	11.47	ppbv
78-77-3	Propane, 1-bromo-2-methyl-	19.00	11.68	ppbv
None	1,3-Dioxolane, 2-(3-bromo-5,5,5-trichlor	19.87	12.74	ppbv
None	Oxalic acid, isobutyl nonyl ester	20.75	23.95	ppbv
770-35-4	1-Phenoxypropan-2-ol	21.28	14.53	ppbv
77572-68-0	Butanal, 3,3-dimethyl-2-oxo-, hemihydrat	22.34	17.72	ppbv
52078-56-5	11-Tricosene	22.60	7.02	ppbv
52078-56-5	11-Tricosene	22.73	15.25	ppbv
19780-79-1	2-Hexyl-1-octanol	22.87	11.24	ppbv

(IS) is BFB Internal Standard and (SS) are Surrogate Standards that are added to each sample.

3/6/2024 16:23

Page 1 of 1

CLP TIC

24-006-04.SMS



0092-24



Chain of Custody Form

For Testing of Product/Material per CA DHS Section 01350

Please fill out a separate chain of custody form for each product tested

General Information (Section A)		
Section A	Manufacturer Name: Schluter Systems	
	Street Address: 194 Pleasant Ridge Road	
	City/State: Plattsburgh, NY	
	Zip/Postal Code: 12901	
	Country: United States	
	Contact Name: Kali Pharand	
	Contact Title: Product Standards and Sustainability Coordinator	
Phone/Fax Numbers: 888-472-4588 x 4152		
Email Address: sustainability@schluter.com		
Sampling Information (Section B)		
Section B	Product Name: BOARD	
	Manufacturer Product ID #: KB 15 1220 2440	
	Sample ID # (Same as TCNA Test Report #): KERDI - BOARD	
	Product Category: FOAM BOARD	
	Product Subcategory:	
	Date Manufactured: NOV '23	
	Plant Name and Location: PLATTSBURGH, NY	
	Date and Time Sample Collected from Plant: 1/31/24	
	Collection Location within Plant: SAMPLES	
	Number of Sample Pieces Collected (Attach Photos): 4	
Sample Collected by: SHAMIM MONDAL	Signature: Shamim Mondal	
Sample Packaged and Shipped to TCNA By: SHAMIM MONDAL	Signature: Shamim Mondal	
Shipping Date: 2/1/24		
Carrier/Airbill Number: UPS		
TCNA Receipt Information (Section C)		
Section C	Arrival to: Tile Council of North America, Inc. 100 Clemson Research Boulevard Anderson, SC 29625	
	Receipt Date: 2.9.2024	
	Received By: Ashley Moore	Signature: am
	Logged into TCNA Database by: Ashley Moore	
	TCNA Test Report #: 0092-24	
	Shipment Forwarded To RTP Laboratories By: Ashley Moore	Signature: amr
	Shipment Date: 2.9.2024	
Carrier/Airbill Number: UPS		
RTP Laboratories Receipt Information (Section D)		
Section D	Arrival to: Research Triangle Park Laboratories, Inc. 7201 ACC Blvd., Suite 104 Raleigh, NC 27617	
	Receipt Date: 2-12-24	
	Received By: Alston Sykes	Signature: A. Sykes
	Condition of Shipping Package: Good	
	Condition of Sample: Good	
	Laboratory ID #: 24-006-04	

Research Triangle Park Laboratories, Inc.

7201 ACC Blvd., Suite 104
Raleigh, NC 27617

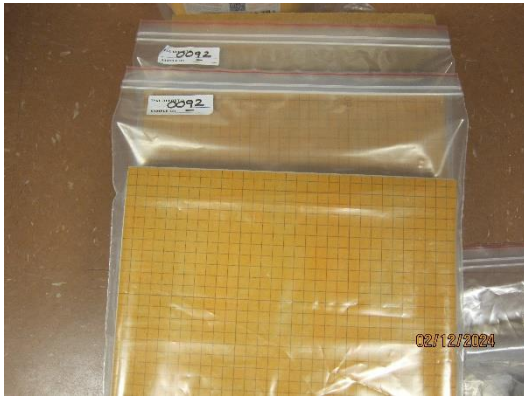
919 510-0228 Telephone
919 510-0141 Fax

Web Site: www.rtp-labs.com



ISO 17025 Compliant
PA Registration #68-1664
DEA Registered

Photo of Sample Received Feb. 12, 2024:
24-006-04 (IPAL-0092-24) Kerdi-Board

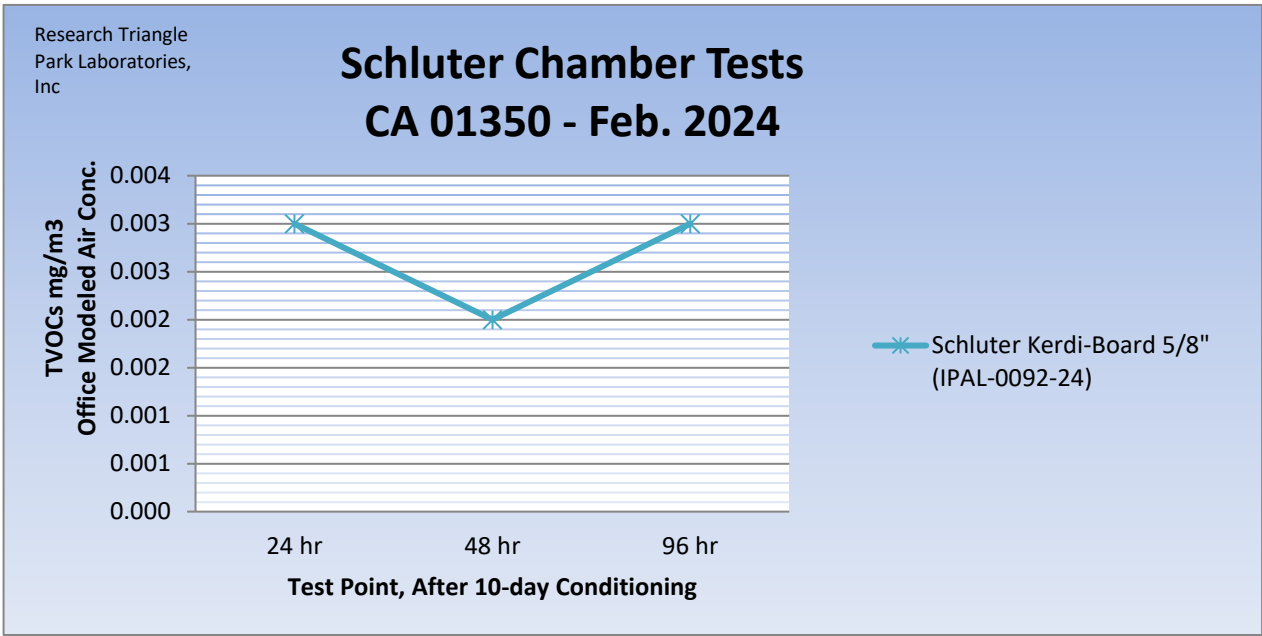


California 01350/ASTM D5116 Small Chamber Tests for Volatile Organic Compound Emissions From Products

Project ID: 24-006-04
Client: Tile Council of North America
Sample Receipt Date: Feb. 12, 2024
Test Start Dates: Feb. 15, 2024
Products:

Schluter Kerdi-Board 5/8" (IPAL-0092-24)

Modeled Standard Office Concentration, mg/m3			
24 hr	48 hr	96 hr	LOQ
0.003	0.002	0.003	0.001



Standard Office Model Parameters:

Room Dimensions: 12 ft length x 10 ft wide x 9.0 ft ht
Room Volume: 30.6 m³
Ventilation Rate: 0.68 air changes per hour
Net Floor Surface: 11.15 m²

Chamber and Sample Conditions:

Chamber Volume: 50 Liters
Temperature: 20-25 C; Relative Humidity: 45-55 %
Air Exchange Rate: 1 per hour (0.833L/min = 50 liters)
Sample Surface Area: 0.0232 m²
Sample Loading Factor: 0.5 m²/m³

Sample Receipt Date: 2/12/2024
 Project ID: 24-006-04
 Sample ID: Schluter Kerdi-Board 5/8" (IPAL-0092-24)
 Client: IPA Labs

Test Start Date: 2/15/2024

10 day conditioning performed prior to 96 h testing.

ASTM D5116 Small Chamber Method							Standard Office Parameters				
California Specification 01350 Office Paints and Wallcoverings Model: 33.4 m2 Office Flooring Products Model: 11.15 m2							Room Dimensions, ft		12x10x9.0		
							Room Volume, m3		30.6		
							Ventilation Rate, ach		0.68		
							Net Surface Area, m2		11.15		
Compound Name	Emission Factors (ug/(m2*h))						Cm	Cm	Cm	1/2 CREL 12/2008 (A)Acute (C)Chronic	
	02/16/24 24 hr Chamber Conc. ug/m3	24 hr EF	02/17/24 48 hr Chamber Conc. ug/m3	48 hr EF	02/29/24 96 hr Chamber Conc. ug/m3	96 hr EF	Office: 24 hr Modeled Air Conc. ug/m3	Office: 48 hr Modeled Air Conc. ug/m3	Office: 96 hr Modeled Air Conc. ug/m3		
<u>GC/MS Target, LOQ 2 ng/L (ug/m3)</u>											
Styrene	11.8	4.8	11	4.5	11.8	4.8	2.6	2.4	2.6	4.5 C 70 C	
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
<u>GC/MS TICs, LOQ 5 ng/L (ug/m3)</u>											
None Detected	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
	0	0.0	0	0.0	0	0.0	0.0	0.0	0.0		
<u>HPLC Aldehydes, LOQ 2 ng/L (ug/m3)</u>											
Formaldehyde	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	4.5 C	
Acetaldehyde	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	70 C	
TVOCs LOQ 25 ng/L (ug/m3) Use 1 for < value	11.8	4.8	11.0	4.5	11.8	4.8	2.6	2.4	2.6	ug/m3	
							0.003	0.002	0.003	mg/m3	
Reporting Limit, 0.001 mg/m3											