International Product Assurance LABORATORIES
100 Clemson Research Blvd., Anderson, SC USA 29625
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www.IPALaboratories.com

November 12, 2024

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

Dear Kali Pharand,

The sample you identified as "PRIMER-U" was tested per CA 01350 VOC Emissions & SCAQMD Rule 1168 VOC Content per your request (IPAL Test Report: IPAL-0091-24). 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) over a 7-day exposure period. 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	Credit: Low-Emitting Materials, Adhesives and Sealants At least 75% of all adhesives and sealants, by cost or surface area, meet the VOC emissions evaluation: • 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/m^3 or	None Detected None Detected (≤0.5mg/m^3)

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	less, between 0.5 and 5 mg/m^3, or 5 mg/m^3 or more). And 100% meet the VOC content evaluation, SCAQMD Rule 1168: Ceramic, Glass, Porcelain, & Stone Tile Adhesive VOC Limit: 65 g/L	 <1.0% VOCs 20% Solids 79% Water VOCs (g/L) $\left(\frac{100-20-0}{\left(\frac{100}{0.99}\right)-\left(\frac{0}{0.997}\right)}\right)1000 < 45.9\,\text{g/L}$
IgCC (ASHRAE 189.1) 2021	Section 801.4.2.1 (8.4.2.1) All adhesives and sealants used inside of the weatherproofing system and applied on-site shall either be: Determined for VOC emissions according to CDPH Standard method and comply with the limit requirements: Table 4-1 Max Allowable Concentration of Target CREL VOCs No. 1 – 35 (including formaldehyde and acetaldehyde) Or Determined for VOC content and limited in accordance with SCAQMD Rule 1168: Ceramic, Glass, Porcelain, & Stone Tile Adhesive VOC Limit: 65 g/L	 None Detected <1.0% VOCs 20% Solids 79% Water VOCs (g/L) $\left(\frac{100-20-0}{\left(\frac{100}{0.99}\right)-\left(\frac{0}{0.997}\right)}\right)1000 < 45.9\,\text{g/L}$
CHPS (U.S.) 2020	EQ C6.1.1 Adhesives & Sealants All adhesives and sealants used on the project in quantities of 2.5 gal (10 liters) or more and totaling 90% or more of the total volumes of such products applied onsite in the project's interior shall meet the VOC content requirements in the applicable category of South Coast Air Quality Management District (SCAQMD) Rule 1168, Adhesive and Sealant Applications: Ceramic, Glass, Porcelain, & Stone Tile Adhesive VOC Limit: 65 g/L	 <1.0% VOCs 20% Solids 79% Water VOCs (g/L) $\left(\frac{100-20-0}{\left(\frac{100}{0.99}\right)-\left(\frac{0}{0.997}\right)}\right)1000 < 45.9\,\text{g/L}$

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WELL v2	X06 VOC Restrictions Newly installed interior wet-applied paints, coatings, adhesives, and sealants meet the methods and thresholds established in SCAQMD Rule 1168: Ceramic, Glass, Porcelain, & Stone Tile Adhesive VOC Limit: 65 g/L	<1.0% VOCs 20% Solids 79% Water VOCs (g/L) $\left(\frac{100-20-0}{\left(\frac{100}{0.99}\right)-\left(\frac{0}{0.997}\right)}\right)1000 < 45.9\,\text{g/L}$
BREEAM	Hea 02 Criterion 10 Interior adhesives and sealants, ≤ 0.06 mg/m³ formaldehyde, ≤1.0 mg/m³ TVOCs, per CDPH Standard Method	None Detected
Living Building Challenge 4.1	Imperative 12 Responsible Materials Volatile organic compound (VOC) content of any wet-applied products must not exceed thresholds established in South Coast Air Quality Management District (SCAQMD) Rule 1168 for Adhesives and Sealants: Ceramic, Glass, Porcelain, & Stone Tile Adhesive VOC Limit: 65 g/L	<1.0% VOCs 20% Solids 79% Water VOCs (g/L) $\left(\frac{100-20-0}{\left(\frac{100}{0.99}\right)-\left(\frac{0}{0.997}\right)}\right)1000 < 45.9\,\text{g/L}$

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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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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: 24-006-03 Primer

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/m^3 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 %
24-006-03	Primer	<1.0 %	20.0 %

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

Sincerely,

Alston Sykes

Alston Sykes, Principal Chemist
Attachments: attachments and photos

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EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-03.SMS **Acquisition Date:** 2/23/2024 16:16

Comment: Tile Council 0091-24; Primer; 0.5g headspace; 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	Not Found	ppbv	1
75-00-3	Chloroethane	Not Found	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	Not Found	ppbv	1
75-15-0	Carbon disulfide	Not Found	ppbv	1
67-63-0	Isopropyl alcohol	56.50	ppbv	1
75-09-2	Methylene chloride	Not Found	ppbv	1
67-64-1	Acetone	110.43	ppbv	1
156-60-5	t-1,2-dichloroethene	Not Found	ppbv	1
11-05-3	Hexane	13.82	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	1.53	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	13.28	ppbv	1
109-99-9	Tetrahydrofuran	1.15	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	3.98	ppbv	1
142-82-5	Heptane	2.82	ppbv	1
71-43-2	Benzene	Not Found	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	97.85	ppbv	1
10061-01-5	cis-1,3-dichloropropene	Not Found	ppbv	1
108-88-3	Toluene	4.96	ppbv	1
108-10-1	4-Methyl-2-pentanone (MIBK)	2.78	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	64.18	ppbv	1
108-90-7	Chlorobenzene	Not Found	ppbv	1
1330-20-7	m/p-Xylene	36.82	ppbv	1
95-47-6	o-Xylene	25.22	ppbv	1
100-42-5	Styrene	9.51	ppbv	1
75-25-2	Tribromomethane	Not Found	ppbv	1
79-34-5	1,1,2,2-tetrachloroethane	1.94	ppbv	1
622-96-8	1-ethyl-4-methylbenzene	75.03	ppbv	1
108-67-8	1,3,5-trimethylbenzene	2.73	ppbv	1
95-63-6	1,2,4-trimethylbenzene	1.76	ppbv	1
541-73-1	1,3-dichlorobenzene	Below MDL	ppbv	1
106-46-7	1,4-dichlorobenzene	Below MDL	ppbv	1
100-44-7	Benzyl chloride	7.12	ppbv	1
95-50-1	1,2-dichlorobenzene	Below MDL	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

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TENTATIVELY IDENTIFIED COMPOUNDS

EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-03.SMS **Acquisition Date:** 2/23/2024 16:16

Comment: Tile Council 0091-24; Primer; 0.5g headspace; 25mL; DF=10.

CAS NO.	COMPOUND NAME	Retention Time	Estimated Concentration,	Units
None	5,6-Dihydro-8-methoxy-N,N-dimethyl-11H-b	5.10	**26.54**	ppbv
151-18-8	3-Aminopropionitrile	5.43	**34.35**	ppbv
591-87-7	Allyl acetate	5.65	**238.53**	ppbv
53327-25-6	Phosphinothioic fluoride, (1,1-dimethylethyl)(pentafluorophenyl)	6.23	**5240.36**	ppbv
78-78-4	Butane, 2-methyl-	8.11	**17.75**	ppbv
1070-87-7	Pentane, 2,2,4,4-tetramethyl	8.91	**4966.22**	ppbv
10147-37-2	Isopropylsulfonyl chloride	12.36	**67.94**	ppbv
98-01-1	Furfural	12.64	**18.67**	ppbv
3396-11-0	Acetic acid, cesium salt	12.88	**21.73**	ppbv
108-03-2	Propane, 1-nitro-	13.07	**16.55**	ppbv
1809-10-5	Pentane, 3-bromo-	13.85	**124.48**	ppbv
142-96-1	n-Butyl ether	14.32	**5452.45**	ppbv
61227-87-0	2,5-Octadiyne, 4,4-diethyl-	14.54	**66.26**	ppbv
63554-28-9	1H-Pyrazole, 1-benzoyl-3-[5-(benzoyloxy)	15.44	**874.71**	ppbv
42569-59-5	4,8-Dioxatricyclo[5.1.0.0(3,5)]octane, 1	15.66	**48.79**	ppbv
305858-46-2	3-Pyridinecarboxylic acid, [[4-(benzoylo	15.90	**1272.18**	ppbv
50463-48-4	Benzenepropionic acid, 4-benzyloxy-	16.10	**706.78**	ppbv
526-73-8	Benzene, 1,2,3-trimethyl-	16.23	**627.60**	ppbv
2883-45-6	1,6-Heptadien-4-ol	16.53	**243.53**	ppbv
5961-33-1	Azetidine, 3-methyl-3-phenyl-	16.60	**56.59**	ppbv
63554-28-9	1H-Pyrazole, 1-benzoyl-3-[5-(benzoyloxy)	16.67	**91.78**	ppbv
49833-91-2	1,2-Pentadiene, 4-methoxy-4-methyl-	16.74	**55.36**	ppbv
21834-98-0	2-Hydroxy-3,5-dimethylcyclopent-2-en-1-o	16.83	**102.11**	ppbv
60034-28-8	Crotonyl isothiocyanate	16.90	**147.94**	ppbv
None	1-Nonylcycloheptane	17.07	**37.05**	ppbv
13913-22-9	1,3-Methanopentalene, octahydro-	17.15	**18.48**	ppbv
107081-99-2	Bicyclo[2.2.1]heptan-2-ol, 2-(2-cyclopen	17.26	**23.54**	ppbv
106-91-2	2-Propenoic acid, 2-methyl-, oxiranylmet	17.44	**367.75**	ppbv
589-66-2	2-Butenoic acid, 2-methylpropyl ester	17.54	**68.17**	ppbv
22520-40-7	DL-4,5-Octanediol	18.02	**18.30**	ppbv
1075-06-5	Ethanone, 2,2-dihydroxy-1-phenyl-	18.13	**50.96**	ppbv
2890-67-7	Cyclohexanemethyl propanoate	18.80	**67.66**	ppbv
None	1,3-Dioxolane, 2-(3-bromo-5,5,5-trichlor	19.88	**21.43**	ppbv
75991-61-6	2,7-Octadiene-1,6-diol, 2,6-dimethyl-, (	20.62	**53.05**	ppbv

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

3/6/2024 16:21 Page 1 of 1 CLP TIC 24-006-03.SMS

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0091-24

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

Section A — General Information (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

Section B — Sampling Information (Section B)

Product Name:	PRIMER
Manufacturer Product ID #:	PRIMER-U
Sample ID # (Same as TCNA Test Report #):	PRIMER-U
Product Category:	PRIMER
Product Subcategory:	
Date Manufactured:	NOV '23
Plant Name and Location:	PLATTSBURGH, NY
Date and Time Sample Collected from Plant:	01/31/24
Collection Location within Plant:	SAMPLES
Number of Sample Pieces Collected (Attach Photos):	1
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

Section C — TCNA Receipt Information (Section C)

Arrival to:	Tile Council of North America, Inc. 100 Clemson Research Boulevard Anderson, SC 29625
Receipt Date:	2.8.2024
Received By: ashley moore	Signature:
Logged into TCNA Database by:	ashley moore
TCNA Test Report #:	0091-24
Shipment Forwarded To RTP Laboratories By: ashley moore	Signature:
Shipment Date:	2.9.2024
Carrier/Airbill Number:	UPS

Section D — RTP Laboratories Receipt Information (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 #:	24-006-03

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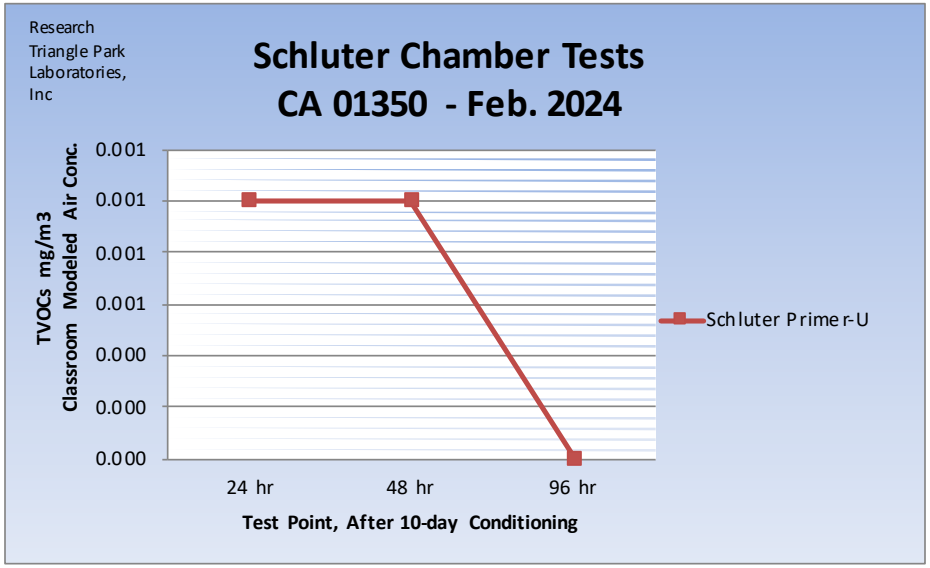
Photo of Sample Received Feb. 12, 2024:
24-006-03 (IPAL-0091-24) Primer

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: 24-006-03
Client: Tile Council of North America
Sample Receipt Date: Feb. 12, 2024
Test Start Dates: Feb. 15, 2024
Products:

	Modeled Standard Classroom Concentration, mg/m3			
	24 hr	48 hr	96 hr	LOQ
Schluter Primer-U	0.001	0.001	0.000	0.001



Standard Classroom Model Parameters:

Room Dimensions: 40 ft length x 24 ft wide x 8.5 ft ht
Room Volume: 231 m^3
Ventilation Rate: 0.90 air changes per hour
Net Floor Surface: 89.2 m^2

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 m^2
Sample Loading Factor: 0.5 m^2/m^3

Sample Receipt Date: **2/12/2024** **Test Start Date:** **2/15/2024** 10 day conditioning performed prior to 96 h testing.
Project ID: **24-006-03**
Sample ID: **Schluter Primer-U (IPAL-0091-24)**
Client: **IPA Labs**

Standard Classroom Parameters

Room Dimensions, ft	40x24x8.5
Room Volume, m3	**231**
Ventilation Rate, ach	**0.9**
Net Surface Area, m2	**89.2**

ASTM D5116 Small Chamber Method

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

	Emission Factors (ug/(m2*h))						**Cm**	**Cm**	Cm	
Compound Name	**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**	**1/2 CREL 12/2008 (A)Acute (C)Chronic**
GC/MS Target, LOQ 2 ng/L (ug/m3)										
Ethyl acetate	2.8	2.3	3.5	2.9	0	0.0	1.0	1.2	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	
GC/MS TICs, LOQ 5 ng/L (ug/m3)										
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	
HPLC Aldehydes, LOQ 2 ng/L (ug/m3)										
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	2.8	**2.3**	3.5	**2.9**	0.0	**0.0**	**1.0**	**1.2**	**0.0**	**ug/m3**
							0.001	**0.001**	**0.000**	**mg/m3**

Reporting Limit, 0.001 mg/m3

Research Triangle Park Laboratories, Inc.
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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 Office Model
Purchase Order: 4628
RTP Labs ID: 24-006-03 Primer

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/m^3 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 %
24-006-03	Primer	<1.0 %	20.0 %

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

Sincerely,

Alston Sykes

Alston Sykes, Principal Chemist
Attachments: attachments and photos

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EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-03.SMS **Acquisition Date:** 2/23/2024 16:16

Comment: Tile Council 0091-24; Primer; 0.5g headspace; 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	Not Found	ppbv	1
75-00-3	Chloroethane	Not Found	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	Not Found	ppbv	1
75-15-0	Carbon disulfide	Not Found	ppbv	1
67-63-0	Isopropyl alcohol	56.50	ppbv	1
75-09-2	Methylene chloride	Not Found	ppbv	1
67-64-1	Acetone	110.43	ppbv	1
156-60-5	t-1,2-dichloroethene	Not Found	ppbv	1
11-05-3	Hexane	13.82	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	1.53	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	13.28	ppbv	1
109-99-9	Tetrahydrofuran	1.15	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	3.98	ppbv	1
142-82-5	Heptane	2.82	ppbv	1
71-43-2	Benzene	Not Found	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	97.85	ppbv	1
10061-01-5	cis-1,3-dichloropropene	Not Found	ppbv	1
108-88-3	Toluene	4.96	ppbv	1
108-10-1	4-Methyl-2-pentanone (MIBK)	2.78	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	64.18	ppbv	1
108-90-7	Chlorobenzene	Not Found	ppbv	1
1330-20-7	m/p-Xylene	36.82	ppbv	1
95-47-6	o-Xylene	25.22	ppbv	1
100-42-5	Styrene	9.51	ppbv	1
75-25-2	Tribromomethane	Not Found	ppbv	1
79-34-5	1,1,2,2-tetrachloroethane	1.94	ppbv	1
622-96-8	1-ethyl-4-methylbenzene	75.03	ppbv	1
108-67-8	1,3,5-trimethylbenzene	2.73	ppbv	1
95-63-6	1,2,4-trimethylbenzene	1.76	ppbv	1
541-73-1	1,3-dichlorobenzene	Below MDL	ppbv	1
106-46-7	1,4-dichlorobenzene	Below MDL	ppbv	1
100-44-7	Benzyl chloride	7.12	ppbv	1
95-50-1	1,2-dichlorobenzene	Below MDL	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

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TENTATIVELY IDENTIFIED COMPOUNDS

EPA Method TO-15 GC/MS VOLATILE ORGANICS ANALYSIS

Data File: c:\varianws\wsdatafiles\voc-02-20-24_entech\24-006-03.SMS **Acquisition Date:** 2/23/2024 16:16

Comment: Tile Council 0091-24; Primer; 0.5g headspace; 25mL; DF=10.

CAS NO.	COMPOUND NAME	Retention Time	Estimated Concentration,	Units
None	5,6-Dihydro-8-methoxy-N,N-dimethyl-11H-b	5.10	**26.54**	ppbv
151-18-8	3-Aminopropionitrile	5.43	**34.35**	ppbv
591-87-7	Allyl acetate	5.65	**238.53**	ppbv
53327-25-6	Phosphinothioic fluoride, (1,1-dimethylethyl)(pentafluorophenyl)	6.23	**5240.36**	ppbv
78-78-4	Butane, 2-methyl-	8.11	**17.75**	ppbv
1070-87-7	Pentane, 2,2,4,4-tetramethyl	8.91	**4966.22**	ppbv
10147-37-2	Isopropylsulfonyl chloride	12.36	**67.94**	ppbv
98-01-1	Furfural	12.64	**18.67**	ppbv
3396-11-0	Acetic acid, cesium salt	12.88	**21.73**	ppbv
108-03-2	Propane, 1-nitro-	13.07	**16.55**	ppbv
1809-10-5	Pentane, 3-bromo-	13.85	**124.48**	ppbv
142-96-1	n-Butyl ether	14.32	**5452.45**	ppbv
61227-87-0	2,5-Octadiyne, 4,4-diethyl-	14.54	**66.26**	ppbv
63554-28-9	1H-Pyrazole, 1-benzoyl-3-[5-(benzoyloxy)	15.44	**874.71**	ppbv
42569-59-5	4,8-Dioxatricyclo[5.1.0.0(3,5)]octane, 1	15.66	**48.79**	ppbv
305858-46-2	3-Pyridinecarboxylic acid, [[4-(benzoylo	15.90	**1272.18**	ppbv
50463-48-4	Benzenepropionic acid, 4-benzyloxy-	16.10	**706.78**	ppbv
526-73-8	Benzene, 1,2,3-trimethyl-	16.23	**627.60**	ppbv
2883-45-6	1,6-Heptadien-4-ol	16.53	**243.53**	ppbv
5961-33-1	Azetidine, 3-methyl-3-phenyl-	16.60	**56.59**	ppbv
63554-28-9	1H-Pyrazole, 1-benzoyl-3-[5-(benzoyloxy)	16.67	**91.78**	ppbv
49833-91-2	1,2-Pentadiene, 4-methoxy-4-methyl-	16.74	**55.36**	ppbv
21834-98-0	2-Hydroxy-3,5-dimethylcyclopent-2-en-1-o	16.83	**102.11**	ppbv
60034-28-8	Crotonyl isothiocyanate	16.90	**147.94**	ppbv
None	1-Nonylcycloheptane	17.07	**37.05**	ppbv
13913-22-9	1,3-Methanopentalene, octahydro-	17.15	**18.48**	ppbv
107081-99-2	Bicyclo[2.2.1]heptan-2-ol, 2-(2-cyclopen	17.26	**23.54**	ppbv
106-91-2	2-Propenoic acid, 2-methyl-, oxiranylmet	17.44	**367.75**	ppbv
589-66-2	2-Butenoic acid, 2-methylpropyl ester	17.54	**68.17**	ppbv
22520-40-7	DL-4,5-Octanediol	18.02	**18.30**	ppbv
1075-06-5	Ethanone, 2,2-dihydroxy-1-phenyl-	18.13	**50.96**	ppbv
2890-67-7	Cyclohexanemethyl propanoate	18.80	**67.66**	ppbv
None	1,3-Dioxolane, 2-(3-bromo-5,5,5-trichlor	19.88	**21.43**	ppbv
75991-61-6	2,7-Octadiene-1,6-diol, 2,6-dimethyl-, (	20.62	**53.05**	ppbv

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

3/6/2024 16:21 Page 1 of 1 CLP TIC 24-006-03.SMS

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0091-24

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

Section A — General Information (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

Section B — Sampling Information (Section B)

Product Name:	PRIMER
Manufacturer Product ID #:	PRIMER-U
Sample ID # (Same as TCNA Test Report #):	PRIMER-U
Product Category:	PRIMER
Product Subcategory:	
Date Manufactured:	NOV '23
Plant Name and Location:	PLATTSBURGH, NY
Date and Time Sample Collected from Plant:	01/31/24
Collection Location within Plant:	SAMPLES
Number of Sample Pieces Collected (Attach Photos):	1
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

Section C — TCNA Receipt Information (Section C)

Arrival to:	Tile Council of North America, Inc. 100 Clemson Research Boulevard Anderson, SC 29625
Receipt Date:	2.8.2024
Received By: ashley moore	Signature:
Logged into TCNA Database by:	ashley moore
TCNA Test Report #:	0091-24
Shipment Forwarded To RTP Laboratories By: ashley moore	Signature:
Shipment Date:	2.9.2024
Carrier/Airbill Number:	UPS

Section D — RTP Laboratories Receipt Information (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 #:	24-006-03

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Photo of Sample Received Feb. 12, 2024:
24-006-03 (IPAL-0091-24) Primer

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

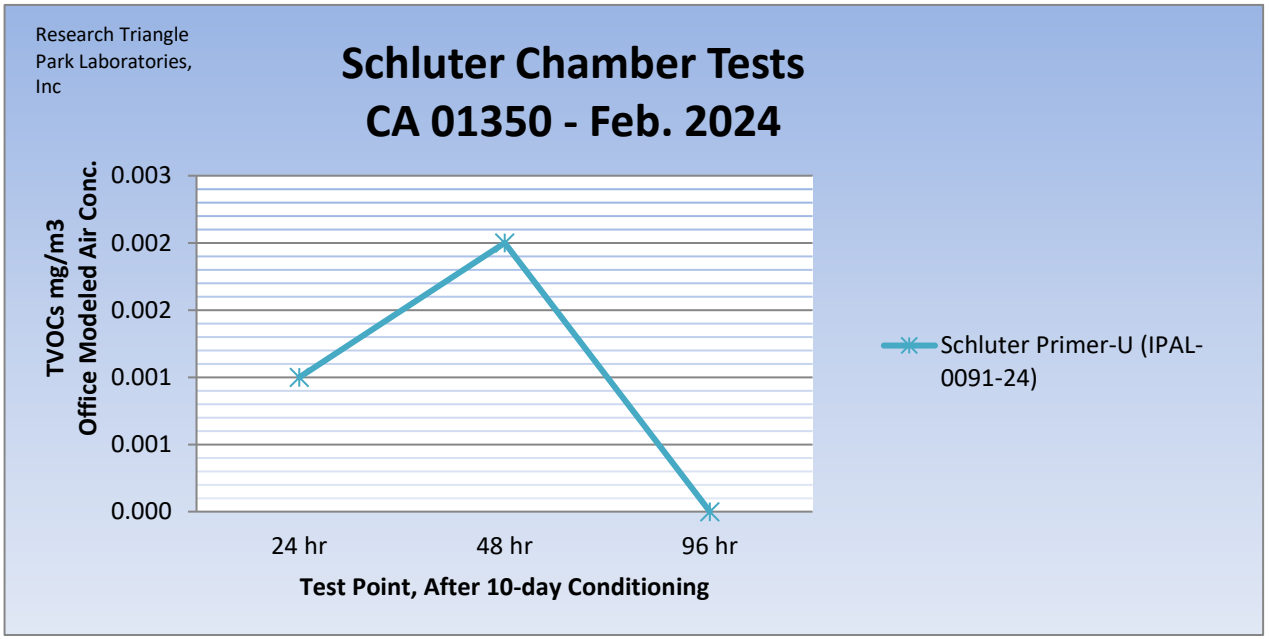
California 01350/ASTM D5116 Small Chamber Tests for Volatile Organic Compound Emissions From Products

Project ID: 24-006-03
Client: Tile Council of North America
Sample Receipt Date: Feb. 12, 2024
Test Start Dates: Feb. 15, 2024
Products:

Schluter Primer-U (IPAL-0091-24)

Modeled Standard Office Concentration, mg/m3

24 hr	48 hr	96 hr	LOQ
0.001	0.002	0.000	0.001



Standard Office Model Parameters:

Room Dimensions: 12 ft length x 10 ft wide x 9.0 ft ht

Room Volume: 30.6 m^3

Ventilation Rate: 0.68 air changes per hour

Net Floor Surface: 11.15 m^2

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 m^2

Sample Loading Factor: 0.5 m^2/m^3

Sample Receipt Date: 2/12/2024 **Test Start Date:** 2/15/2024 10 day conditioning performed prior to 96 h testing.
Project ID: 24-006-03
Sample ID: Schluter Primer-U (IPAL-0091-24)
Client: IPA Labs

Standard Office Parameters

Room Dimensions, ft	12x10x9.0
Room Volume, m3	**30.6**
Ventilation Rate, ach	**0.68**
Net Surface Area, m2	**11.15**

ASTM D5116 Small Chamber Method

California Specification 01350

Office Paints and Wallcoverings Model: 33.4 m2
Office Flooring Products Model: 11.15 m2

	Emission Factors (ug/(m2*h))						Cm	Cm	Cm	
Compound Name	**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**	**1/2 CREL 12/2008 (A)Acute (C)Chronic**
GC/MS Target, LOQ 2 ng/L (ug/m3)										
Ethyl acetate	2.8	2.3	3.5	2.9	0	0.0	1.2	1.5	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	
GC/MS TICs, LOQ 5 ng/L (ug/m3)										
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	
HPLC Aldehydes, LOQ 2 ng/L (ug/m3)										
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	2.8	**2.3**	3.5	**2.9**	0.0	**0.0**	**1.2**	**1.5**	**0.0**	**ug/m3**
							0.001	**0.002**	**0.000**	**mg/m3**

Reporting Limit, 0.001 mg/m3