

March 2019

Product Distributor: Rollease Acmeda

Testing Laboratory: Berkley Analytical

Risk Assessor: Labeling Sustainability Inc.

California Proposition 65 – Tempe Fabric

A single chemical or single pathway exposure assessment for the VOCs off gassed by the fabric **Tempe BO 118" Ebony**, distributed by Rollease Acmeda, tested by Berkley Analytical, in test report numbers 1135-001-01A-Dec2118 was performed.

Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.2 was performed with the intent of determining the state of compliance of the materials for both California Proposition 65. A hazard assessment for the potential health impacts of FORMALDEHYDE (CAS No: 50-00-00) as listed on California Proposition 65, declared by the Office of Environmental Health Hazard Assessment (OEHHA), on the current list of chemicals updated November 23, 2018, was performed by Labeling Sustainability Inc. This assessment was not a multipathway risk assessment or stochastic risk assessment. The final calculated level of formaldehyde (micrograms/day) was reported at the average for each risk category by age and also as an Average Lifetime Daily Inhalation Dose of formaldehyde in micrograms/day. No calculated risk categories by age reported a value that is not in compliance with the California Proposition 65 chemical reporting threshold of 40 micrograms/day therefore no label is required for the fabric referred to in the test report as Kit 1: **Tempe BO 118" Ebony** distributed by Rollease Acmeda and tested by Berkley Analytical in test report numbers *1135-001-01A-Dec2118*.

A complete listing of all components included in the tested fabric are detailed in Table 1. All calculations and assumptions are based on the model data that is for predicted formaldehyde concentration in air in 30.6 m³ of an indoor environment. For purposes of the report and subsequent calculations it is referred to Private Office (30.6 m³).

Formaldehyde is the only chemical released through the off-gassing in the fabric **Tempe BO 118" Ebony**, commonly referred to in the test report as Kit 1, that is listed on the California Environmental Protection Agency, OEHHA Proposition 65 list. The No Significant Risk Level (NSRL) – Inhalation threshold is 40 µg/day. All calculations were executed with the purpose of determining if the individual level of VOC exceeds the criteria set forth by the State of California in determining a Safe Harbor Level. Additional calculations were presented to determine the VOC compliance of the material with the United States EPA guidelines for formaldehyde.

In accordance with the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.2 as prepared by the California Department of Public Health, dated January 2017, Section 8.7.1.5

“A range of product models, brands and/or styles with varying characteristics may be grouped together for testing purposes if the products can be expected to have virtually the same performance during testing and use. A test group shall only include models which are made using the same production methods and are comprised of the same product ingredients (formulation). The test sample shall be selected from the model in the group that can be expected to give the worst results for the test taking into consideration special attributes, materials, methods of manufacturing, suppliers, etc.”

This allows for the full line of fabrics distributed by Rollease Acmeda to be labeled in Table 1. An excerpt from the full report by Berkeley Analytical, number 1135-001-01A-Dec2118 is included as evidence of the full system tested.

Table 1: Fabrics covered by test Kit 1, Bold type denotes actual fabric tested

ITEM #	Item Description
062002500ALM	Tempe BO 98.4" Almond
062002500CLO	Tempe BO 98.4" Cloud
062002500DES	Tempe BO 98.4" Desert
062002500EBO	Tempe BO 98.4" Ebony
062002500ESP	Tempe BO 98.4" Espresso
062002500LIN	Tempe BO 98.4" Linen
062002500POL	Tempe BO 98.4" Polar
062002500STR	Tempe BO 98.4" Straw
062002500WHE	Tempe BO 98.4" Wheat
062003000ALM	Tempe BO 118" Almond
062003000CLO	Tempe BO 118" Cloud
062003000DES	Tempe BO 118" Desert
062003000EBO	Tempe BO 118" Ebony
062003000ESP	Tempe BO 118" Espresso
062003000LIN	Tempe BO 118" Linen
062003000POL	Tempe BO 118" Polar
062003000STR	Tempe BO 118" Straw
062003000WHE	Tempe BO 118" Wheat

The U.S. EPA Guidelines for Exposure Assessment for Inhalation provides the methodology and calculations for the estimated adjusted air concentration in an inhaled does using dose response factors for each age bin in mg/m³ and the average daily inhalation dose calculated in mg/kg-d. The calculations use EPA defaults and predefined units of measure. Both the EPA calculations and California Hot Spots calculations were used for the risk assessment because they base their assumptions of different methodologies. CA Hot Spots uses as an input daily breathing rates reported in L/kg BW-day. The EPA assessment determines inhalation rates from a different peer reviewed study and calculates them at m³/hour. The differing methodologies create varying results despite calculating to the same unit. Regardless of these variances no calculations reached the 40µ/day threshold that would require the Tempe BO 118" Ebony referred to in the test report as Kit 1, to issue a Proposition 65 label in the State of California; No label is needed because the tested product does not reach the cancer threshold as stated on California Proposition 65 Chemical List. For a list of all daily levels (Tables below)

Table 2: California Proposition 65 Calculations Using Methodology from the California Hot Spots Technical Support Document for Exposure Assessment

	Residential (70 y) 30.6 m ³				
	mg/kg-d	mg/day	mg/m ³	mg/kg-d	µ/day
	Dose through inhalation/air	Inhalation of formaldehyde	Concentration of formaldehyde/air	Average daily dose (inhalation)	
Third Trimester	2.06E-05	2.95E-06	2.40E-06	5.03E-03	0.003
0<2	3.18E-04	8.82E-04	1.98E-05	1.20E-03	0.089
2<16	2.19E-04	4.86E-03	1.34E-04	5.99E-04	0.49
16<52					
16<70	9.08E-05	4.61E-03	5.18E-03	2.63E-04	0.46
Total LI (mg)		.011			
Average LI/d(mcg)					4.61E-04

Total LI= Total Lifetime Inhalation

Average LI/d= Average Lifetime Inhalation per day

Table 3: California Proposition 65 calculations Using Methodology from the United States EPA Guidelines for Exposure Assessment

	Commercial (52 y) 30.6 m ³				
	mg/kg-d	mg/day	mg/m ³	mg/kg-d	µ/day
	Dose through inhalation/air	Inhalation of formaldehyde	Concentration of formaldehyde/air	Average daily dose (inhalation)	
Third Trimester	2.53E-04	1.41E-05	1.00E-06	1.50E-03	0.01
0<2			8.01E-06	4.51E-04	
2<16	3.16E-04	2.74E-03	5.61E-05	1.71E-04	0.03
16<30	1.47E-04	2.74E-03			0.03
16<52			1.44E-04	5.41E-05	
16<70	1.30E-04	2.08E-03			0.02



COMPLIANCE TESTED by berkeley analytical

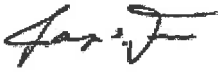
VOC Emission Test Certificate

Product Name: Window Covering - Tempe BO / 06003000EBO

Product Sample Information

Company: Rollease Acmeda
Company Website: www.rolleseaacmeda.com
Product Type: Window Covering (any)
Date Produced: 11/29/2018

Certificate Information

Certificate No: 181221-01
Certified By: 
Raja S. Tannous, Laboratory Director
Date: December 21, 2018

Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017 (Emission testing method for CA Specification 01350)

Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard:

Exposure Scenario ¹	Individual VOCs of Concern ²		Formaldehyde ³		TVOC ⁴ Range
	Criterion	Compliant?	Criterion	Compliant?	
Private Office	≤½ Chronic REL	YES	≤9.0 µg/m ³	YES	≤ 0.5 mg/m ³

Product Coverage⁵: Not applicable

1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.2-2017)
2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (*ibid.*)
3. Maximum allowable formaldehyde concentration is ≤9 µg/m³, effective Jan 1, 2012; previous limit was ≤16.5 µg/m³ (*ibid.*)
4. Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m³, >0.5 – 4.9 mg/m³, and ≥5.0 mg/m³
5. Informative and applicable only to tests of wet-applied products; grams of sample applied per square meter of substrate

Standards & Codes Recognizing CDPH Standard Method V1.2 (partial list)

- USGBC LEED Version 4, BD&C, ID&C
- The WELL Building Standard

Narrative: Rollease Acmeda selected a sample representative of its Window Coverings Kit 1 - product and submitted it on 11/30/2018 for testing. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.2-2017. The results of the test are presented in Berkeley Analytical report, 1135-001-01A-Dec2118.

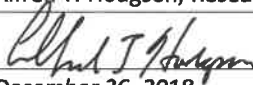
Berkeley Analytical is an independent, third-party laboratory specializing in the analysis of organic chemicals emitted by and contained in building products, finishes, furniture, and consumer products. We are an ISO/IEC 17025 accredited laboratory (IAS, [TL-383](#)); all standards used in performing this test are in Berkeley Analytical's scope of accreditation.

DISCLAIMER: THIS CERTIFICATE OF COMPLIANCE AFFIRMS THAT: 1) A SAMPLE OF THE LISTED PRODUCT WAS TESTED ACCORDING TO THE REFERENCED STANDARD; 2) THE MEASURED VOC EMISSIONS FROM THE SAMPLE WERE EVALUATED FOR THE DEFINED EXPOSURE SCENARIO(S); AND 3) THE RESULTS MEET THE ACCEPTANCE CRITERIA OF THE REFERENCED STANDARD(S). BERKELEY ANALYTICAL IS NOT RESPONSIBLE FOR ANY CLAIMS REGARDING A PRODUCT OR PRODUCTS ENTERED INTO COMMERCE THAT MAY BE BASED ON THIS TEST. BERKELEY ANALYTICAL PROVIDES THIS CERTIFICATE OF COMPLIANCE "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

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VOC Emissions from Building Products

Customer & Building Product Sample Information

Report Certification	
Report number	1135-001-01A-Dec2118
Report date	December 21, 2018
Certified by (Name/Title)	Alfred T. Hodgson, Research Director
Signature	
Date	December 26, 2018

Standards	
Test method	CDPH/EHLB/Standard Method V1.2 (Sect. 01350)
Acceptance criteria	CDPH/EHLB/Standard Method V1.2
Modeling scenario	CDPH/EHLB/Standard Method V1.2 Standard Office
Product type	Window Covering (any)

Customer Information	
Manufacturer or organization	Rollease Acmeda
City/State/Country	Stamford, CT USA
Contact name/Title	Patrick O'Connell
Phone number	617-680-0300

Product Sample Information*	
Manufacturer (if not customer)	Same as above
Product name / Number	Window Covering / 062003000EBO
Product CSI category	Window Treatments (12 20 00)
Customer sample ID	Kit 1 Tempe BO 118" Ebony
Manufacturing location	Rollease Acmeda, Conover NC 28613
Date sample manufactured	Nov 29, 2018
Date sample collected	Nov 29, 2018
Date sample shipped	Nov 29, 2018
Date sample received by lab	Nov 30, 2018
Condition of received sample	No observed problems
Lab sample tracking number	1135-001-01A
Conditioning start date & duration	Nov 30, 2018; 10 days
Chamber test start date & duration	Dec 10, 2018; 4 days (96 hours)
Total test start date & duration	Nov 30, 2018; 14 days (336 hours)

*Chain-of-custody (COC) form for product sample is attached to this report

Conformity Assessment – CDPH VOC Concentration Criteria

VOC Emission Test Results – The product sample was tested for emissions of VOCs following California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017. The chamber test results were modeled to one or more scenario(s) defined in CDPH Standard Method V1.2. The modeled indoor VOC concentrations then were compared to the acceptance criteria defined in CDPH Standard Method V1.2 to determine compliance of the product sample to the standard. The modeling scenario(s) are detailed in Table 3, and the predicted indoor VOC concentrations at 336 hours are given in Table 6 of this report. The allowable concentrations used as acceptance criteria are reproduced in Appendix B of this report. Table 1 summarizes the pass/fail results based on the predicted indoor air concentrations of individual VOCs of concern in the modeled scenario(s).

TVOC Concentration Range – USGBC’s LEED v4 rating systems for buildings include a requirement for reporting of the predicted TVOC concentration in one of three range categories, i.e., $\leq 0.5 \text{ mg/m}^3$, >0.5 to 4.9 mg/m^3 , and $\geq 5.0 \text{ mg/m}^3$. Table 1 includes the TVOC concentration range in the modeled scenario(s).

Table 1. Pass/Fail results based on the test method and identified modeling scenario. Only detected individual VOCs with defined acceptance criteria are listed. The TVOC concentration range also is shown

Chemical	CAS No	Allowable Concentration ($\mu\text{g}/\text{m}^3$)	Predicted Private Office Concentration (Pass/Fail)
Formaldehyde	50-00-0	9	Pass
TVOC ^a	--	--	$\leq 0.5 \text{ mg}/\text{m}^3$

^a Reporting of TVOC range is for information only; TVOC is not a Pass/Fail criterion

Photographs of Tested Product Specimen

Photo Documentation – The product sample specimen is photographed immediately following specimen preparation and prior to initiating the conditioning period. Typically, the top and bottom faces of the specimen are photographed.

