

COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate

Product Name: Thermo-Sorb HB

Product Sample Information				
Company:	Carboline Global, Inc.			
Company Website:	www.carboline.com			
Product Type:	Paints & Coatings - Fireproofing			
Date Produced:	June 15, 2025			

Certificate Information					
Certificate No:	251008-03				
Certified By:	far. J				
	Raja S. Tannous, Laboratory Director				
Date:	October 8, 2025				

Reference Standard & Modeling Scenario: 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
	Criterion	Compliant?	Criterion	Compliant?	Range
School Classroom	≤½ Chronic REL	YES	≤9.0 μg/m³	YES	≤ 0.5 mg/m³
Private Office	≤½ Chronic REL	YES	≤9.0 μg/m³	YES	≤ 0.5 mg/m³

Sample Coverage⁵: 931 g/m²

- 1. Exposure scenarios and product quantities for classroom & office are defined in Tables 4-2 4-5 (CDPH Standard Method 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 January 1, 2012; previous limit was ≤16.5 µg/m³ (ibid.)
- 4. Informative only; predicted TVOC Range in three categories: ≤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 4/4.1, BD&C, ID&C, Residential BD&C Multifamily
- The WELL Building Standard, WELL v2, Feature X06
- ANSI/GBI 01-2019 Green Globes Assessment Protocol
- ANSI/ASHRAE/USGBC/IES Standard 189.1

Narrative: Carboline selected a sample representative of its Thermo-Sorb HB intumescent fireproofing product and submitted it on September 17, 2025 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, 904-055-01A-Oct0825.

Berkeley Analytical is an independent testing 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
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