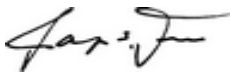
COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate

Product Name: FireSolve® SB

Product Sample Information	
Company:	Isolatek International
Company Website:	www.isolatek.com
Product Type:	Paints & Coatings
Date Produced:	May 8, 2025

Certificate Information	
Certificate No:	250711-01
Certified By:	 Raja S. Tannous, Laboratory Director
Date:	July 11, 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); Section 4.3.6, Modeling parameters for products not specifically addressed in data tables. See the Company-defined product use statement attached to this certificate.

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/m^3	YES	≤ 0.5 mg/m^3
Private Office	≤½ Chronic REL	YES	≤9.0 µg/m^3	YES	≤ 0.5 mg/m^3

Sample Coverage[5]: 333 g/m^2

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/m^3, effective January 1, 2012; previous limit was ≤16.5 µg/m^3 (*ibid*.)
4. Informative only; predicted TVOC Range in three categories: ≤0.5 mg/m^3, >0.5 – 4.9 mg/m^3, and ≥5.0 mg/m^3
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: Isolatek International selected a sample representative of its FireSolve® SB product and submitted it on June 19, 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, 1535-001-01A-Jul1125.

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 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.

June 19, 2025

ISOLATEK®
Fireproofing innovators since 1875

41 Furnace Street
Stanhope, NJ 07874
isolatek.com

CDPH V1.2 Product Use Statement

Firesolve® SB is an intumescent fire resistive material designed for exposed steel columns in environments where aesthetics and life safety are equally prioritized—such as atriums, classrooms, and offices. Concealed structural steel (e.g., floor beams or joists) is typically protected with Spray-Applied Fire Resistive Materials (SFRMs) in these environments.

CLASSROOM
In a standard 25' x 30' column grid layout, a 40' x 24' x 8.5' classroom would have the highest use case of 2 exposed columns. These are commonly HSS 6" x 6" x 3/8" steel columns at 8 feet in height.

- Surface area per face: 6 in × 8 ft = 4 ft^2
- Total for 4 sides: 16 ft^2
- Rounded up for margin: 20 ft^2 per column
- Total exposed area for two columns = 40 ft^2 (3.71 m^2)

With a dry film thickness of 261 mils (0.261 in) and a cured density of 0.147 g/cm^3, the dry weight per square foot is calculated as follows:

- 0.261 in = 0.6639 cm
- Volume = 0.6639 cm × 929.03 cm^2 = 616.5 cm^3/ft^2
- Mass = 616.5 cm^3 × 0.147 g/cm^3 = 90.6 g/ft^2 = 0.20 lbs/ft^2
- Total dry weight = 0.20 lbs/ft^2 × 40 ft^2 = 8.0 lbs

Material usage: Based on field experience, applying Firesolve® SB at 261 mils to this surface area requires approximately 4 gallons of wet product.

OFFICE
A 10' x 12' x 9' office with 25' x 30' grid spacing would likely have 1 exposed column.

- Surface area (8 ft tall): 4 sides × 4 ft^2 = 16 ft^2
- Rounded to 20 ft^2 per column (1.83 m^2)
- Dry weight:
- 0.20 lbs/ft^2 × 20 ft^2 = 4.0 lbs total
-

Material usage:
To achieve a 2-hour rating at 261 mils, a single column of this size would require ~2 gallons of wet Firesolve® SB.

These estimates assist with early project planning and material forecasting. All applications must follow the Firesolve® SB Application & Installation Manual and comply with listed UL fire-resistance designs for code compliance and fire protection assurance.

We trust this information is of assistance.

Sincerely,

Daniel Ehehalt
Sr. Technical Services Manager
Isolatek® Fire Protection Products