



COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate

Product Name: LD-C-50

Product Sample Information		Certificate Information	
Manufacturer:	Icynene Inc	Certificate No:	120111-02
Manf. Website:	www.icynene.com	Certified By:	 Raja S. Tannous, Laboratory Director
CSI Category & No.:	Foamed-In-Place Insulation (07 21 19)	Date:	January 11, 2012
Date Produced:	12/9/2011		

Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010 (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	
	Criterion	Compliant?	Criterion	Compliant?
School Classroom	≤½ Chronic REL	YES	≤9.0 µg/m ³	YES
Private Office	≤½ Chronic REL	YES	≤9.0 µg/m ³	YES

1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.1-2010)
2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (*ibid.*)
3. Maximum allowable formaldehyde concentration is 16.5 µg/m³ before Dec. 31, 2011 & 9 µg/m³ on Jan 1, 2012 (*ibid.*)

Potential Applications

- CALGreen, CA Code of Regulations Title 24, Part II, 2010, Sections A4.504.3/A5.504.4.8: Thermal Insulation
- ANSI/ASHRAE/USGBC/IES Standard 189.1-2009, Section 8.4.2.6: Ceiling & Wall Systems
- USGBC LEED for Schools, 2009, IEQ Credit 4.6: LEM - Ceiling & Wall Systems
- Collaborative for High Performance Schools (CHPS) rating system, 2009, Criteria EQ2.2.6: Ceiling & Wall Systems
- ANSI/GBI 01-2010 Green Building Assessment Protocol, 2010, Table 12.2.1-C: Floors & Other Interior Products

Narrative: Icynene Inc selected a sample representative of its LD-C-50 product and submitted it for testing commencing on 12/14/2011. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.1-2010. The results of the test are presented in Berkeley Analytical report, 354-009-02A-Jan1112.

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) the product sample was tested according to the referenced standard; 2) the measured VOC emissions were evaluated for the defined exposure scenario(s); and 3) the results meet the acceptance criteria of the referenced standard(s). Potential applications of the test and this certificate are suggested. 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.