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VOC TEST REPORT

VOC Content

22 March 2021

1 Sample Information

Sample name	Sikafloor®-31 PurCem®
Sample no.	392-2021-00059909
Production date	A: 25-11-2020; B: 15-12-2020; C: 01-01-2021
Batch No.	A: 3005106702; B: 3005137406; C: 3005139873
Sample reception	02/02/2021

2 Brief Evaluation of the Results

Regulation or protocol	Conclusion	Version of regulation or protocol
SCAQMD Rule 1113	Pass	February 2016
LEED v4.1 (VOC Content)	Pass	

Full details based on the testing and direct comparison with limit values are available in the following pages
Regarding pass/fail decision rule please see appendix



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Analytical Service Manager

3 Applied Test Methods

3.1 General Test References

Regulation, protocol or standard	Scope	Version
SCAQMD Rule 1113	Architectural coatings	February 2016

3.2 Specific Laboratory Sampling and Analyses

Test	Regulation, protocol or standard	Version	Internal SOP	Limit of detection	Uncertainty U _m
				[g/L]	%
Solids Content	ASTM D2369	2020	71 M 544830	1	10
VOC	ASTM D2369	2020	71 M 544830	1	10

3.3 Preparation of the Test Specimen

The sample was mixed according to the manufacturers specification. The mixing ratio was 23 g A + 23 g B + 32 g C. The sample was left to cure for 1 hour before applying a portion of the sample to the test dish.

4 Results

4.1 VOC content

	Remarks on the test results	Results	Unit
Density *	Tested by the lab	1.5	g/mL
Water Content ¹	Tested by the lab	6.9	% (w/w)
Solids Content	Tested by the lab	93.6	% (w/w)
VOC content (less water)	Calculated based on the results above	< 1	g/L

4.2 Comparison with Limit Values of VOC Content (less Water)

Parameter	Results	Product type	Regulation or protocol	VOC limit
	[g/L]			[g/L]
VOC content	< 1	Floor coating	SCAQMD Rule 1113	50

The results are only valid for the tested sample(s).

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5 Appendices

5.1 How to Understand the Results

5.1.1 Acronyms Used in the Report

- < Means less than
- > Means bigger than
- * Not a part of our accreditation
- ± Please see section regarding uncertainty in the Appendices
- 1 Analysed by another Eurofins laboratory

5.2 Description of VOC Content Test

5.2.1 Testing of VOC

Volatile content of the sample was determined gravimetrically by heating to 110 °C in 60 minutes. Multicomponent products are mixed according to the manufacturer's instructions and allowed to cure before heating.

The result is the average of two replicates. The result was calculated as:

$$VOC = \frac{([g \text{ All Volatiles}] - [g \text{ Water}] - [g \text{ Exempt Compounds}])}{([liter \text{ Material}] - [liter \text{ Water}] - [liter \text{ Exempt Compounds}])}$$

The determination is performed in conformity with ISO 11890-2 and the commission decision 2014/312/EU of 28 May 2014 establishing the ecological criteria for the award of the EU Ecolabel for indoor and outdoor paints and varnishes, with its most recent amendments and its most recent User Manual.

Analyses are performed with a slightly polar gas chromatographic column (HP-5). Mass spectrometric detection is used for identification and flame ionization detector is used for quantification. Identified compounds are quantified with their authentic response factors, or with their relative response factors using 1,2-diethoxyethane as internal standard. Remaining unknown peaks are quantified in diethyl adipate equivalents.

5.2.2 Testing of Density

The density was calculated using gravimetric and volumetric determination. The result is the average of three determinations.

5.2.3 Testing of Water Content

The water content was determined using a Karl-Fischer titration.

5.3 Uncertainty of the Test Method

Um(%): The expanded uncertainty Um is equal to 2 x RSD%.

5.4 Decision Rules

Eurofins Product Testing A/S, declare statement of conformity based on the "Binary Statement for Simple

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Acceptance Rule” described in ILAC’s “Guidelines on decision Rules and Statements of Conformity” ILAC-G8:09/2019.

This means that results above the detection limit are always reported with two significant digits. Results are evaluated with the same number of significant digits as the corresponding limit values, and conformity is based on results being less than or equal to limit values.

For limit values with more than two significant digits, the third digit will be used to confirm whether a result is below or equal to the limit value. It will always be indicated in the evaluation table if this expanded evaluation is performed.

For further information please visit www.eurofins.dk/product-testing/om-os/beslutningsregler/

5.5 Version History

Report date	Report number	Modification
22 March 2021	392-2021-00059909_XG_EN	Current version