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VOC TEST REPORT

VOC Content

24 April 2023

1 Sample Information

Sample name	Multimastic SP
Sample no.	392-2022-00557904
Stated production date	16/11/2022
Batch No.	LP006
Sample reception	14/12/2022

2 Brief Evaluation of the Results

Regulation or protocol	Conclusion	Version of regulation or protocol
SCAQMD Rule 1168	Pass	October 2017
LEED v4.1 (VOC Content)	Pass	February 2021

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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3 Applied Test Methods

3.1 General Test References

Regulation, protocol or standard	Scope	Version
SCAQMD Rule 1168	Adhesive and sealant applications	October 2017

3.2 Specific Laboratory Sampling and Analyses

Test	Regulation, protocol or standard	Version	Internal SOP	Limit of detection	Uncertainty $U_{m\pm}$
				[g/L]	%
Solids Content	ASTM D2369	2020	71 M 544830	1	10
VOC	ASTM D2369/Rule 1168	2020	71 M 544830	1	10
Water content *	Karl-Fischer titration	-	SPP 065-D	-	2
Density *	Internal method	-	71 M 543130	-	10

3.3 Preparation of the Test Specimen

The sample was homogenised and applied directly onto the test dish.

4 Results

4.1 VOC content

	Remarks on the test results	Results	Unit
Density *	Tested by the lab	1.54	g/mL
Water content ^{1*}	Tested by Eurofins approved subcontractor	14.4	% (w/w)
Exempt compounds *	Assumed to be 0	0	% (w/w)
Solids Content	Tested by the lab	85	% (w/w)
VOC content (less water)	Calculated based on the results above	12	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	12	Architectural sealant	SCAQMD Rule 1168	250

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:

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

5.2.2 Testing of Density

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

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 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
24/04/2023	392-2022-00557904_XG_EN_rev2	Revision of result in 4.1 and 4.2. This version is considered valid.
09/03/2023	392-2022-00557904_XG_EN_rev1	Revision of result in 4.2. The water content has been recalculated from a double determination. This version is no longer valid.
13/01/2023	392-2022-00557904_XG_EN	This version is no longer valid.