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# TEST REPORT VOC Content

9 November 2023

## 1 Sample Information

Sample name Sigmatin DGL Matt Sample no. 392-2023-00460702

Stated production date 16/08/2023

Batch No.

Sample reception 02/10/2023

## 2 Brief Evaluation of the Results

Regulation or protocol	Conclusion	Version of regulation or protocol
Decopaint	Pass	Directive 2004/42/CE

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

Janne Rothmann Norup Analytical Service Manager

# 3 Applied Test Methods

#### 3.1 General Test References

Regulation, protocol or standard	Scope	Version
Decopaint	Paints and varnishes	Directive 2004/42/CE

## 3.2 Specific Laboratory Sampling and Analyses

Test	Regulation, protocol or standard	Version	Internal SOP	Limit of detection	Uncertainty Um¤
				[mg/kg]	%
VOC	ISO 11890-2	2020	71 M 546002	50	20
Density *	Internal method	-	71 M 543130	-	10

## 4 Results

## 4.1 Results Used in Calculation

	Remarks on the test results	Results	Unit
Density *	Tested by the lab	1.41	g/mL

## **4.2 Total VOC Content**

	CAS No.	Results	Unit
Ethylglycol *	110-80-5	0.28	g/L
VOC content	-	0.28	g/L

## 4.3 Comparison with Limit Values of VOC Content

Parameters	Results	Product type	Regulation or protocol	VOC limit
	[g/L]		·	[g/L]
VOC content	0.28	Interior matt walls and ceilings	Decopaint	30

## 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 (ISO 11890-2)

Volatile Organic Compounds (VOC) include all organic compounds with an initial boiling point less than or equal to 250 °C measured at standard pressure of 101.3 kPa.

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.

## 5.3 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/

The analysis are carried out on the sample(s) as received and the result(s) are only valid for the tested sample(s). This report may only be copied or reprinted in its entirety.



# **5.5 Version History**

Report date	Report number	Modification
09/11/2023	392-2023-00460702_XG_EN	Current version