

## **Product Testing**



Eurofins Polska Sp. z o.o. Al. Wojska Polskiego 90A 82-200 Malbork POLAND Eurofins Product Testing A/S Smedeskovvej 38 8464 Galten Denmark

VOC@eurofins.com www.eurofins.com/VOC-testing

## VOC TEST REPORT VOC Content

26 June 2017

## 1 Sample Information

Sample name R-KEM-II

Batch no. -

Production date

Product type Sealants - Architectural

Sample reception 18/05/2017

## 2 Brief Evaluation of the Results

Regulation or protocol	Conclusion	Version of regulation or protocol
LEED IEQ 4.1/4.2	PASS	SCAQMD Rule 1168

Full details based on the testing and direct comparison with limit values are available in the following pages

Morten Sielemann Analytical Chemist



# **Product Testing**



## 3 Applied Test Methods

## 3.1 General Test References

Test	Regulation, protocol or standard	Version	Internal SOP	Limit of detection [g/L]	Uncertainty Um¤
Solids Content	ASTM D2369	2010	71 M 544830	1	10
VOC	ASTM D2369	2010	71 M 544830	1	10
Density	Internal method	-	71 M 543130	-	10

## 4 Results

## **4.1 VOC Content**

	Remarks on the test results	Results	Unit
Density	Tested by the lab	1.63	g/mL
Water Content	Supplied by the costumer	0	% (w/w)
Exempt compounds	Assumed to be 0	0	% (w/w)
Solids Content	Tested by the lab	98.2	% (w/w)
VOC content	Calculated based on the results above	29	g/L

## 4.2 Comparison with Limit Values

Parameter	Results [g/L]	Product type	VOC limit [g/L]
VOC content	29	Sealants - Architectural	250



## Product Testing



## 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:

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

### 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

The relative standard deviation of the overall analysis is 10%. The expanded uncertainty Um equals 2 x RSD. For further information please visit www.eurofins.dk/uncertainty.