

#### **Product Testing**



Allfasteners USA LLC 480 Meadow Lane Carlstadt, NJ, 07072 USA Eurofins Product Testing A/S Smedeskovvej 38 8464 Galten Denmark

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

# VOC TEST REPORT VOC Content

18 September 2020

#### 1 Sample Information

Sample name VF200PRO
Batch no. 451076 17
Production date 17.03.2017

Product type Multipurpose Construction Adhesives

Sample reception 27/03/2017

#### 2 Brief Evaluation of the Results

Regulation or protocol	Conclusion	Version of regulation or protocol
LEED IEQ 4.1	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 Rasmus Stengaard Christensen Analytical Service Manager, MSc in Chemistry



## **Product Testing**



### 3 Applied Test Methods

#### 3.1 General Test References

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

#### 4 Results

#### **4.1 VOC Content**

	Remarks on the test results	Results	Unit
Density	Supplied by the costumer	1.74	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	97.6	% (w/w)
VOC content	Calculated based on the results above	42	g/L

#### 4.2 Comparison with Limit Values

Parameter	Results [g/L]	Product type	VOC limit [g/L]
VOC content	42	Multipurpose Construction Adhesives	70





#### **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
- <sup>n</sup> Please see section regarding uncertainty in the Appendices.
- 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:

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

#### 5.3 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.