

## Manufacturer's Certificate of Compliance – VOC Emissions

Certificate: Eco70 L # 7098 (Carpet Tile)

Company: modulyss NV

**Tested Product** Eco70 L # 7098

#### Related Products

modulyss tufted carpet tiles, FR, Bitumen backed, 100 % PA6 SDN (all items)

## **Product Names**

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Centennium	In Groove
Color&	Line-up
Connexxion	Millennium
Converse	Minimum70 / Minimum100
Eco70 L / Eco100 L	Perugia TT
Eco70 C / Eco100 C	Reverse70 / Reverse100
First	Round-up
First Absolut	Shine-up
First Lines	

The actual test sample was provided by modulyss NV to be representative of our Eco70 L # 7098 product. The product was submitted for testing on December 10<sup>th,</sup> 2010. The test results are given in Berkley Analytical laboratory report 520-002-02A-Dec3010.

The results are compliant with VOC emission requirements for use in an office environment as defined in the CA DHS Standard Practice. Additionally, the testing requirements are met to qualify the product as a low-emitting carpet for the CRI Green Label Plus program and for USGB LEED for Commercial Interiors and for New Construction and Major Renovation as attested in Berkley Analitical Certificate number 101230-02 (see attached). Based on the single test that was performed and assuming that the products mentioned above will perform similarly (same type of yarn and same production process), it can be deduced that all of the listed products will meet the VOC emission requirements as defined in the California Department of Health Services Standard Practice (also known as chamber testing portion of CA 01350).

Dated January 11th, 2011

Kalvie De Corner

Katrien De Cooman Environmental Engineer

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## **Certificate of Compliance – VOC Emissions**

# ECO 70 L #7098 (Tile Carpeting) Modulyss NV

Modulyss NV selected a sample representative of its ECO 70 L #7098 product, a PA6 SDN tufted carpet tile, manufactured at Modulyss NV, Zele, Belgium, and submitted it for testing on December 10, 2010. Berkeley Analytical measured and evaluated the emissions of volatile organic compounds (VOCs) from this sample according to California Department of Public Health (CDPH) *Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers*, Version 1.1, 2010.; *also known as*, chamber testing portion of CA Section 01350). Chemical sampling and analysis were performed following U.S. EPA Compendium Method TO-17 and ASTM Standard Method D 5197-09.

Calculations were performed with the following standard office exposure parameters to project the concentrations of VOCs of concern resulting from the use of this product. Also, VOC emission factors were compared to the carpet 14-day emission test criteria of the Carpet and Rug Institute's (CRI) Green Label Plus program. The results of the test and the evaluations are presented in Berkeley Analytical laboratory report, 520-002-02A-Dec3010.

#### **Exposure Scenario**

Standardized	Room Volume	Area Specific Air Flow	Flooring
Environment	(m³)	Rate (m/h)	Area (m²)
Office	30.6	1.86	11.1

## Summary of test results according to the CA DHS Standard Practice guidelines & CRI criteria:

 Predicted concentrations and emission factors of all VOCs of concern listed in the CDPH Standard Method, V1.1 including formaldehyde plus the compounds specifically listed by the CRI Green Label Plus program for carpets were below the guideline values.

The product sample meets the VOC emission testing requirements to qualify the product as a low-emitting carpet for the CRI Green Label Plus program and for USGBC LEED 2009 for Commercial Interiors and for New Construction and Major Renovation, IEQ Credit 4.3 Low-Emitting Materials – Flooring Systems.

Certificate No.: 101230-02 Dated: December 30, 2010

Raja S. Tannous Laboratory Director Ericka Gelsey Quality Manager

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## Manufacturer's Certificate of Compliance – VOC Emissions

Certificate: Perpetual # 7084 (Carpet Tile)

Company: modulyss NV

**Tested Product** Perpetual # 7084

### **Related Products**

modulyss tufted carpet tiles, FR, Bitumen backed, 100 % PA6 piece dyed (all items)

Product Names		
Latina		
Perpetual		
Resist 70 / Resist 100		
Step		

The actual test sample was provided by modulyss NV to be representative of our Perpetual # 7084 product. The product was submitted for testing on October 29<sup>th,</sup> 2010. The test results are given in Berkley Analytical laboratory report 520-001-01A-Nov1610.

The results are compliant with VOC emission requirements for use in an office environment as defined in the CA DHS Standard Practice. Additionally, the testing requirements are met to qualify the product as a low-emitting carpet for the CRI Green Label Plus program and for USGB LEED for Commercial Interiors and for New Construction and Major Renovation as attested in Berkley Analitical Certificate number 101116-01 (see attached). Based on the single test that was performed and assuming that the products mentioned above will perform similarly (same type of yarn and same production process), it can be deduced that all of the listed products will meet the VOC emission requirements as defined in the California Department of Health Services Standard Practice (also known as chamber testing portion of CA 01350).

Dated January 11th, 2011

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Katrien De Cooman Environmental Engineer



## **Certificate of Compliance – VOC Emissions**

# PERPETUAL #7084 (Tile Carpeting) Modulyss NV

Modulyss NV, Zele, Belgium and submitted it for testing on October 29, 2010. Berkeley Analytical measured and evaluated the emissions of volatile organic compounds (VOCs) from this sample according to California Department of Health Services (CA DHS) *Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers* (CA/DHS/EHLB/R-174, 2004, including 2004 Addenda; *also known as*, chamber testing portion of CA Section 01350) and ASTM Standard Guide D 5116-06. Chemical sampling and analysis were performed following U.S. EPA Compendium Methods TO-1 and TO-17 and ASTM Standard Method D 5197-09.

Calculations were performed with the following standard office exposure parameters to project the concentrations of VOCs of concern resulting from the use of this product. Also, VOC emission factors were compared to the carpet 14-day emission test criteria of the Carpet and Rug Institute's (CRI) Green Label Plus program. The results of the test and the evaluations are presented in Berkeley Analytical laboratory report, 520-001-01A-Nov1610.

#### **Exposure Scenario**

Standardized	Room Volume	Area Specific Air Flow	Flooring
Environment	(m³)	Rate (m/h)	Area (m²)
Office	30.6	1.85	11.1

### Summary of test results according to the CA DHS Standard Practice guidelines & CRI criteria:

Predicted concentrations and emission factors of all VOCs of concern listed in the CA DHS
 Standard Practice including formaldehyde plus the compounds specifically listed by the CRI
 Green Label Plus program for carpets were below the guideline values.

Based on these results, the tested product sample meets the VOC emission requirements for use in an office environment as defined in the CA DHS *Standard Practice*. Additionally, the testing requirements are met to qualify the product as a low-emitting carpet for the CRI Green Label Plus program and for USGBC LEED 2009 for Commercial Interiors and for New Construction and Major Renovation, IEQ Credit 4.3 Low-Emitting Materials – Flooring Systems.

Certificate No.: 101116-01 Dated: November 16, 2010

Raja S. Tannous Laboratory Director Ericka Gelsey
Quality Manager

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