



September 28, 2007

Mr. Ivan Stoler  
Allstate Rubber Corporation  
105-12 101 Avenue  
Ozone Park, NY 11416

AQS Reports: 15659-01

Dear Mr. Stoler:

Thank you for choosing Air Quality Sciences, Inc. (AQS), an ISO 9001:2000 registered IAQ company, for your product testing needs. Enclosed is a final report, which presents the test protocols and resulting data. The flooring sample tested, "FreiFloor™, PVC Free Contract Flooring" has TVOC, formaldehyde and total aldehydes emissions below reportable levels. Thus, this product is predicted to meet the GREENGUARD emissions criteria.

We appreciate this opportunity to assist you. If you have any questions or wish to discuss your results, please feel free to contact our Product Evaluation Group at (770) 933-0638 or (800) 789-0419.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Mason", written over a light blue horizontal line.

Stephany I. Mason, Ph.D.  
Technical Director

Enclosures

## ENVIRONMENTAL CHAMBER TEST REPORT FOR FLOORING

ELAPSED EXPOSURE HOUR	TVOC EMISSION FACTOR $\mu\text{g}/\text{m}^2\cdot\text{hr}$
24.0	BQL

**Customer:** Allstate Rubber Corporation

**AQS Sample Identification:** AQS15659-010AA

**Product Description:** FLOORING; FreiFloor™, PVC Free Contract Flooring  
(one sided area = 0.0361 m<sup>2</sup>)

**Product Loading:** 0.42 m<sup>2</sup>/m<sup>3</sup>

**Test Conditions:** 1.00 ACH  
50.0% RH ± 5.0% RH  
23.0°C ± 2.0°C

**Test Period:** 09/22/2007 – 09/23/2007

**Test Description:** The product was received by AQS on September 20, 2007 as packaged and shipped by the customer. The package was visually inspected and stored in a controlled environment immediately following sample check-in. Just prior to loading, the product was unpackaged, prepared for required loading, and placed in a tray to expose the top surface side only. The sample was placed inside the environmental chamber, and tested according to the specified protocol.

Environmental chamber test following ASTM D 5116 in a 0.09 ± 0.005 m<sup>3</sup> chamber.

Analysis based on EPA Method IP-1B and ASTM D 6196 for VOCs by thermal desorption followed by gas chromatography/mass spectrometry (TD/GC/MS).

BQL = Below quantifiable level of 0.04  $\mu\text{g}$  based on a standard 18 L air collection volume.

**EMISSION FACTORS OF SELECTED ALDEHYDES  
AT 24.0 ELAPSED EXPOSURE HOURS**

**PREPARED FOR: ALLSTATE RUBBER CORPORATION  
PRODUCT: 15659-010AA, FREIFLOOR™, PVC FREE CONTRACT FLOORING**

CAS NUMBER	COMPOUND IDENTIFIED	EMISSION FACTOR µg/m <sup>2</sup> •hr
4170-30-3	2-Butenal	BQL
75-07-0	Acetaldehyde	BQL
100-52-7	Benzaldehyde	BQL
5779-94-2	Benzaldehyde, 2,5-dimethyl	BQL
529-20-4	Benzaldehyde, 2-methyl	BQL
100000-61-1	Benzaldehyde, 3- and/or 4-methyl	BQL
123-72-8	Butanal	BQL
590-86-3	Butanal, 3-methyl	BQL
50-00-0	Formaldehyde	BQL
66-25-1	Hexanal	BQL
110-62-3	Pentanal	BQL
123-38-6	Propanal	BQL

Analysis based on ASTM D5197 and EPA Method IP-6A for selected aldehydes by high performance liquid chromatography (HPLC).

BQL = Chemical below quantifiable level of 0.1 µg based on a standard 45 L air collection volume.