

**GREENGUARD EMISSIONS TEST FOR
ADHESIVES/SEALANTS**

Prepared for
THERM O WEB

Test Product Description: **Glue Web**



August 31, 2007

Date

AQS Report No. 15604-01R
Supersedes AQS Report No. 15604-01

EXECUTIVE SUMMARY

PROJECT DESCRIPTION

Air Quality Sciences, Inc. (AQS) is pleased to present the results of its indoor air quality (IAQ) evaluation of an **Adhesives/Sealants** product identified as "Glue Web" as submitted by Therm O Web. AQS conducted this study using a GREENGUARD product evaluation test protocol (1) following the requirements of The GREENGUARD Environmental Institute's (GEI) Product Certification Program, ASTM Standard D 5116, and the United States Environmental Protection Agency (USEPA) (2-4). Testing of the product was conducted using standard environmental chamber operating conditions as presented in Table 1. The adhesive was delivered to AQS by the manufacturer as presented in the Chain of Custody description in Appendix 1.

Products meeting all the emissions requirements of the GREENGUARD Environmental Institute are eligible for listing in the GREENGUARD Product Guide™ for a one year period from the date of notification to the manufacturer. The listed product is exactly as described in Appendix 1. The product is eligible to remain listed for one year as certification program processes are initiated. Listing in the GREENGUARD Product Guide does not qualify the product for certification, nor does it entitle Inscape Corporation to market or promote the product as GREENGUARD Certified or use the registered certification mark.

The adhesive was monitored for emissions of total volatile organic compounds (TVOCs), formaldehyde, total aldehydes, and other individual volatile organic compounds (IVOCs) over a 168 hour exposure period. These emissions were measured and the resultant air concentrations were determined for each of the potential pollutants. Air concentration predictions were computer modeled based on the GEI Requirements, which include a standard room loading and ASHRAE Standard 62.1-2004 ventilation conditions (5). Product loading is based on standard furniture construction adhesive usage (24.4 m²) in a 32 m³ room. Results were compared to current emission levels as required by the GREENGUARD standard.

RESULTS

The adhesive identified as "Glue Web" qualifies as low-emitting; it meets all of the emission level requirements of the GREENGUARD Product Guide Listing as indicated below.

GREENGUARD Acceptable IAQ Criteria		Product Measurement	Product Compliance for IAQ
TVOC	≤ 0.25 mg/m ³	0.01 mg/m ³	Yes
Formaldehyde	≤ 0.025 ppm	< 0.001 ppm	Yes
Total Aldehydes	≤ 0.05 ppm	< 0.001 ppm	Yes
4-Phenylcyclohexene	≤ 0.00325 mg/m ³	< 0.001 mg/m ³	Yes
Styrene	≤ 0.035 mg/m ³	< 0.001mg/m ³	Yes
Individual VOC's	all < 1/10 TLV*	-----	Yes

* All individual VOCs detected met the criteria of less than 1/10 the ACGIH established threshold limit values (TLVs) (ref. 14).