CERTIFICATE
OF COMPLIANCE

GREENGUARD

PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

HAG

HÅG Conventio

Restrictions:

4558-410
Certificate Number

05/18/2006 - 05/19/2017
Certificate Period

Certified
Status

UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.

Seating units are tested in accordance with ANSI/BIFMA M7.1-2011 and determined to comply with ANSI/BIFMA X7.1-2011 and ANSI/BIFMA e3-2014e Credit 7.6.1. Seating units are modeled in the seating environment.

Environment

UL Environment investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL Environment and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Environment Mark for the identified Product(s) manufactured at the production site(s) covered by the ULE Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Certification Criteria for Mattresses, Bedding, Component Materials and Seating Units

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC(A)	-	0.25	mg/m³
Formaldehyde	50-00-0	30.7 (25 ppb)	µg/m³
Total Aldehydes (B)	-	0.05	ppm
4-Phenylcyclohexene (C)	4994-16-5	3.25	µg/m³
Individual VOCs (D)	-	1/10th TLV	-

(A) Defined to be the total response of measured VOCs falling within the C_6 – C_{16} range, with responses calibrated to a toluene surrogate.

(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

(C) Applicable to flooring and furniture, including component materials.

(D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).

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