# CERTIFICATE OF COMPLIANCE




## Groupe Lacasse

C.A.

91921-420
Certificate Number

04/25/2017 - 05/23/2019
Certificate Period

Certified
Status

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

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.

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 Gold Certification Criteria for Furniture and Mattresses

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|---|---|---|---|
| TVOC (A) | - | 0.22 | mg/m³ |
| Formaldehyde | 50-00-0 | 9 (7.3 ppb) | µg/m³ |
| Total Aldehydes (B) | - | 0.043 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m³ |
| 1-Methyl-2-pyrrolidinone (C) | 872-50-4 | 160 | µg/m³ |
| Individual VOCs (D) | - | 1/2 CREL<br>or<br>1/100th 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) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day.

(D) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.1 and BIFMA level credit 7.6.2 and 1/100th 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).

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.*

# CERTIFICATE OF COMPLIANCE




## Groupe Lacasse

C.A.

91921-410
Certificate Number

04/25/2017 - 05/23/2019
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.

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 Furniture and Mattresses

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|---|---|---|---|
| TVOC(A) | - | 0.50 | mg/m³ |
| Formaldehyde | 50-00-0 | 61.3 (50 ppb) | µg/m³ |
| Total Aldehydes (B) | - | 0.10 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m³ |
| Individual VOCs (C) | - | 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) 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).

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.*