

GREENGUARD Certification Criteria for Furniture and Mattresses

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|--------------------------------|------------|---|-------------------|
| TVOC _(A) | - | 0.50 | mg/m ³ |
| Formaldehyde | 50-00-0 | 61.3 (50 ppb) | μg/m ³ |
| Total Aldehydes _(B) | - | 0.10 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | μg/m ³ |
| Individual VOCs _(C) | - | 1/10th TLV | - |

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ 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).



GREENGUARD Gold Certification Criteria for Furniture and Mattresses

| Criteria | CAS Number | Maximum Allowable Predicted Concentration | Units |
|---|------------|---|-------------------|
| TVOC ^(A) | - | 0.22 | mg/m ³ |
| Formaldehyde | 50-00-0 | 9 (7.3 ppb) | µg/m ³ |
| Total Aldehydes ^(B) | - | 0.043 | ppm |
| 4-Phenylcyclohexene | 4994-16-5 | 6.5 | µg/m ³ |
| 1-Methyl-2-pyrrolidinone ^(C) | 872-50-4 | 160 | µg/m ³ |
| Individual VOCs ^(D) | - | 1/2 CREL or 1/100th TLV | - |

- (A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ 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 v1.2 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).

