

CERTIFICATE OF COMPLIANCE



**Doellken, Surteco PTE,
Ltd**

3D Edgebanding - High Gloss

15207-410

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building materials are determined compliant in accordance with an Office (32m³ Room) environment with an air change of 0.72 hr⁻¹ and a loading of 1.50 m².

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (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).



CERTIFICATE OF COMPLIANCE



SURTECO GmbH

ABS Edgebanding - Printed Colors

15194-410

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building materials are determined compliant in accordance with an Office (32m³ Room) environment with an air change of 0.72 hr⁻¹ and a loading of 1.50 m².

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (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).



CERTIFICATE OF COMPLIANCE



**Doellken, Surteco PTE,
Ltd**

PVC Edgebanding - Solid Colors

15205-410

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building materials are determined compliant in accordance with an Office (32m³ Room) environment with an air change of 0.72 hr⁻¹ and a loading of 1.50 m².

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (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).



CERTIFICATE OF COMPLIANCE



**Doellken, Surteco PTE,
Ltd**
Rigid ABS

20634-410

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building materials are determined compliant in accordance with an Office (32m³ Room) environment with an air change of 0.72 hr⁻¹ and a loading of 1.50 m².

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (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).



CERTIFICATE OF COMPLIANCE



Doellken, Surteco PTE,
Ltd

3D Edgebanding

15206-420

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building products and interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office (32m³ Room) Environment.

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) 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
- (E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHA) 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).



CERTIFICATE OF COMPLIANCE



**Doellken, Surteco PTE,
Ltd**

PVC Edgebanding -Printed Colors

Restrictions:

15204-420

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building products and interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office (32m3 Room) Environment.

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) 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
- (E) 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).



CERTIFICATE OF COMPLIANCE



SURTECO GmbH

PP Edgebanding - Solid Colors

15195-410

Certificate Number

09/29/2010 - 09/29/2022

Certificate Period

Certified

Status

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

Building materials are determined compliant in accordance with an Office (32m³ Room) environment with an air change of 0.72 hr⁻¹ and a loading of 1.50 m².

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



UL 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 and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL 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 Building Products and Interior Finishes

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
Particle Matter less than 10 µm ^(C)	-	50	µg/m ³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Individual VOCs ^(D)	-	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. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (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) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (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).

