

CLASSIFICATION: 06 05 13

created via: HPDC Online Builder

PRODUCT DESCRIPTION: High pressure decorative laminates in Grades 10, 12, 20 and A-7 consist of multiple ply's of kraft paper saturated with phenolic resin solids to form the core base Laminate surfaces consist of papers saturated with melamine resin solids. Formica laminate can fabricated as an applied surface to countertops, table tops, casework, wall panels and other decorative surfaces where design, ease of maintenance and lasting durability are required.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
 Basic Method

Threshold Disclosed Per

- Material
 Product

Threshold level

- 100 ppm
 1,000 ppm
 Per GHS SDS
 Per OSHA MSDS
 Other

Residuals/Impurities

- Considered
 Partially Considered
 Not Considered
Explanation(s) provided for Residuals/Impurities?
 Yes No

Are All Substances Above the Threshold Indicated:

- Characterized**
Percent Weight and Role Provided? Yes No
- Screened**
Using Priority Hazard Lists with Results Disclosed? Yes No
- Identified**
Name and Identifier Provided? Yes No

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

HIGH PRESSURE LAMINATE | KRAFT PAPER **NoGS** **PHENOLIC RESIN** **LT-P1** | **RES MELAMINE RESIN** **LT-UNK** **UNDISCLOSED (DECORATIVE SURFACE LAYER)** **NoGS**]

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-P1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

Ranges for substances' percent weight are provided.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Formaldehyde emissions: GreenGuard - Gold (previously Children & Schools)
Sustainable forestry: FSC Certification - Chain of Custody (COC)
Other: NSF 35

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2018-02-07
PUBLISHED DATE: 2018-02-07
EXPIRY DATE: 2021-02-07

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

HIGH PRESSURE LAMINATE

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals are tested by UL environment on a quarterly basis and Greenguard Gold certificate is achieved for Total VOC on all Formica Grades 10, 12, 20 and A-7.

OTHER PRODUCT NOTES: Formica HPL are layers of paper saturated with phenolic resins for the core and melamine resins for the surface décor sheets. They are pressed under high pressure and 300 deg F temperatures. The monomers and polymers react under these conditions thus polymerizing into a thermoset hard resin system. The residuals are a very small fraction of the unreacted monomers and are less than 7.3 parts per billion under the Greenguard test protocol.mentioned in this HPD.

KRAFT PAPER

ID: 65996-61-4

#: 56.0000 - 63.0000 GS: NoGS RC: PostC NANO: No ROLE: Core structural layer

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Post consumer content 8-14%

PHENOLIC RESIN

ID: 9003-35-4

#: 14.0000 - 19.0000 GS: LT-P1 RC: None NANO: No ROLE: Polymeric core sheet binder

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Used to saturate kraft paper prior to pressing and curing operation.

MELAMINE RESIN

ID: 9003-08-1

#: 8.0000 - 12.0000 GS: LT-UNK RC: None NANO: No ROLE: Polymeric surface sheet binder

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Used to saturate decorative and protective surface sheets prior to pressing and curing operation.

#: 6.0000 - 11.0000 GS: NoGS RC: None NANO: No ROLE: Decorative Surface Layer

HAZARDS: None Found AGENCY(IES) WITH WARNINGS: No warnings found on HPD Priority lists

SUBSTANCE NOTES: Used to impart design and protective surface to HPDL.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

FORMALDEHYDE EMISSIONS GreenGuard - Gold (previously Children & Schools)

CERTIFYING PARTY: Third Party
 APPLICABLE FACILITIES: Evendale, Ohio and St. Jean, Canada
 CERTIFICATE URL: <http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/emissions-and-greenguard>
 ISSUE DATE: 2007-04-30
 EXPIRY DATE: 2018-10-28
 CERTIFIER OR LAB: UL Environment-Greenguard

CERTIFICATION AND COMPLIANCE NOTES: Certification is renewed on an annual basis. The renew cycle date is October 28th. Formica laminates have been evaluated under the GREENGUARD certification program since 2007 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 V1.2-2007 using a Classroom Environment

SUSTAINABLE FORESTRY FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: Third Party
 APPLICABLE FACILITIES: Evendale, Ohio and St. Jean, Canada
 CERTIFICATE URL: <http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/fsc-certified-wood>
 ISSUE DATE: 2015-06-04
 EXPIRY DATE: 2020-06-04
 CERTIFIER OR LAB: SCS

CERTIFICATION AND COMPLIANCE NOTES: FSC is an independent, non-government, not-for-profit organization established to promote responsible forest management practices worldwide. It was created out of concern for the loss of the world's forests and failure to address deforestation. FSC forest management certification is awarded to forest managers who adopt practices that provide environmental, social and economic benefits. FSC Principles and Criteria provide a foundation for all forest management standards globally.

OTHER NSF 35

CERTIFYING PARTY: Third Party
 ISSUE DATE: 2007-01- EXPIRY DATE: 2020- CERTIFIER OR LAB: NSF

Canada

CERTIFICATE URL:

[http://info.nsf.org/Certified/Food/Listings.asp?](http://info.nsf.org/Certified/Food/Listings.asp?Company=17720&Standard=035)[Company=17720&Standard=035](http://info.nsf.org/Certified/Food/Listings.asp?Company=17720&Standard=035)

CERTIFICATION AND COMPLIANCE NOTES: The requirements of NSF/ANSI 35 are applicable to HPDL for use as work and nonwork surfaces of food service equipment on which direct contact during normal preparation or holding operations is not intended, expected, or reasonable. Applications of HPDL covered by this Standard include wait stations, service counters, and other counters used in conjunction with cutting boards or other means of preventing direct food contact with the laminate

+ Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

FORMICA BRAND CONTACT ADHESIVES

HPD URL: <http://www.formica.com/en/us/products/adhesives>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Contact Adhesives are used to bond HPDL to various substrates including Particleboard, Medium Density Fiberboard and Hardwood Faced Plywood.

FORMICA IDEAL EDGE

HPD URL: <http://www.formica.com/en/us/products/idealedge-real>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

.Eliminate the flat edges and brown seams traditionally associated with laminate surfaces with IdealEdge® Decorative Edging. Available in two stunning profiles, Ogee and Bullnose, IdealEdge® mimics the contemporary look often found on more expensive stones, granites and quartzes

Section 5: General Notes

Formica brand laminates have been evaluated under the GREENGUARD certification program since 2007 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 V1.2-2007 using a Classroom Environment. A generic EPD is available at <http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/leed>.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Formica**
ADDRESS: **10155 Reading Road**
Cincinnati Ohio 45241, USA

CONTACT NAME: **Dave Swenson**
TITLE: **Sales Tech Services**
PHONE: **513 786 3536**

KEY

OSHA MSDS	Occupational Safety and Health Administration Material Safety Data Sheet
GHS SDS	Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity	GLO Global warming	PHY Physical Hazard (reactive)
CAN Cancer	MAM Mammalian/systemic/organ toxicity	REP Reproductive toxicity
DEV Developmental toxicity	MUL Multiple hazards	RES Respiratory sensitization
END Endocrine activity	NEU Neurotoxicity	SKI Skin sensitization/irritation/corrosivity
EYE Eye irritation/corrosivity	OZO Ozone depletion	LAN Land Toxicity
GEN Gene mutation	PBT Persistent Bioaccumulative Toxic	NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-P1 List Translator Possible Benchmark 1
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-1 List Translator Likely Benchmark 1
BM-2 Benchmark 2 (use but search for safer substitutes)	LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
BM-1 Benchmark 1 (avoid - chemical of high concern)	NoGS Unknown (no data on List Translator Lists)
BM-U Benchmark Unspecified (insufficient data to benchmark)	

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

- Nested Method / Material Threshold** Substances listed within each material per threshold indicated per material
- Nested Method / Product Threshold** Substances listed within each material per threshold indicated per product
- Basic Method / Product Threshold** Substances listed individually per threshold indicated per product

- Nano** Composed of nano scale particles or nanotechnology
- Third Party Verified** Verification by independent certifier approved by HPDC
- Preparer** Third party preparer, if not self-prepared by manufacturer
- Applicable facilities** Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.

CLASSIFICATION: 06 05 00

PRODUCT DESCRIPTION: Backing sheets used to balance high pressure laminate panels. Since panels can warp due to uneven moisture on one face vs the other backers help to maintain panel equilibrium as ambient humidity changes.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
 Basic Method

Threshold Disclosed Per

- Material
 Product

Threshold level

- 100 ppm
 1,000 ppm
 Per GHS SDS
 Per OSHA MSDS
 Other

Residuals/Impurities

- Considered
 Partially Considered
 Not Considered

Explanation(s) provided
for Residuals/Impurities?

- Yes No

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No

% weight and role provided for all substances.

Screened Yes Ex/SC Yes No

All substances screened using Priority Hazard Lists with results disclosed.

Identified Yes Ex/SC Yes No

One or more substances not disclosed by Name (Specific or Generic) and Identifier and/ or one or more Special Condition did not follow guidance.

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

[MATERIAL](#) | [SUBSTANCE](#) | [RESIDUAL OR IMPURITY](#)
[GREENSCREEN SCORE](#) | HAZARD TYPE

[BACKING SHEETS](#) [[KRAFT PAPER](#) [NoGS](#) [PHENOL-FORMALDEHYDE RESIN \(PRIMARY CASRN IS 9003-35-4\)](#) [LT-P1](#) | [RES](#)]

Number of Greenscreen BM-4/BM3 contents ... 0

Contents highest concern GreenScreen
Benchmark or List translator Score ... LT-P1
Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

Ranges for substances' percent weight are provided.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

VOC emissions: UL/GreenGuard Gold Certified
Sustainable forestry: FSC Certification - Chain of Custody (COC)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-01-23

PUBLISHED DATE: 2019-01-23

EXPIRY DATE: 2022-01-23



Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

BACKING SHEETS

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Since Backers are produced using phenol formaldehyde resins there is some off gassing after production. Resins have been optimized to produce the minimal amounts of formaldehyde gas. Backers are submitted to UL Environment Green guard program and the gas measured. Formica Backers have received the Green guard Gold certification and tested to less than 7.3 ppb.

OTHER PRODUCT NOTES:

KRAFT PAPER

ID: Not registered

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-23

#: 74.0000 - 76.0000

GS: NoGS

RC: None

NANO: No

ROLE: Core structural layer

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

No hazards found

SUBSTANCE NOTES: Sheets of Kraft paper are saturated with resin and pressed under high temperature and pressure to produce backers. These core structural layers are bonded due to resin cross flow and cross linking between sheets. Produced without the decor layer typical of HPL

PHENOL-FORMALDEHYDE RESIN (PRIMARY CASRN IS 9003-35-4)

ID: 2180992-35-0

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-01-23

#: 24.0000 - 26.0000

GS: LT-P1

RC: None

NANO: No

ROLE: Polymeric core binder sheet

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Sheets of Kraft paper are saturated with resin and pressed under high temperature and pressure to produce backers. These core structural layers are bonded due to resin cross flow and cross linking between sheets. Produced without the decor layer typical of HPL

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

VOC EMISSIONS

UL/GreenGuard Gold Certified

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2007-**

EXPIRY DATE: **2019-**

CERTIFIER OR LAB: **UL**

APPLICABLE FACILITIES: **St. Jean, Canada and Evendale, Ohio**

04-30

10-28

Environment

CERTIFICATE URL:

<http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/emissions-and-greenguard>

CERTIFICATION AND COMPLIANCE NOTES: Certification is renewed on an annual basis. The renewal date is October 28th. Formica backers have been evaluated under the Green Guard certification program since 2007 UL 2818-2103 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 (CDHP) Standard Method V12-2007 using a Classroom Environment.

SUSTAINABLE FORESTRY

FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: **Third Party**

ISSUE DATE: **2015-**

EXPIRY DATE: **2020-**

CERTIFIER OR LAB: **SCS**

APPLICABLE FACILITIES: **St. Jean Canada and Evendale, Ohio**

06-04

06-04

CERTIFICATE URL:

<http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/fsc-certified-wood>

CERTIFICATION AND COMPLIANCE NOTES: FSC is an independent, non-government, not-for-profit organization established to promote responsible forest management practices worldwide. It was created out of concern for the loss of the world's forests and failure to address deforestation. FSC forest management certification is awarded to forest managers who adopt practices that provide environmental, social and economic benefits. FSC Principles and Criteria provide a foundation for all forest management standards globally.

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

FORMICA BRAND CONTACT ADHESIVES

HPD URL:

<http://www.formica.com/en/us/products/adhesives18>

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Contact Adhesives are used to bond HPDL and Backers to various substrates including Particleboard, Medium Density Fiberboard and Hardwood Faced Plywood.

Formica brand laminates have been evaluated under the GREENGUARD certification program since 2007 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 V1.2-2007 using a Classroom Environment. A generic EPD is available at <http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/leed>.



MANUFACTURER INFORMATION

MANUFACTURER: **Formica**

ADDRESS: **10155 reading rd**

cincinnati OHIO 45241, USA

WEBSITE: **<http://www.formica.com/en/us/trade-products>**

CONTACT NAME: **Dave Swenson**

TITLE: **Sales Tech Services**

PHONE: **513 786 3536**

EMAIL: **dave.swenson@formica.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)

REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes)

BM-1 Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1

LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)

PostC Postconsumer

Both Both Preconsumer and Postconsumer

Unk Inclusion of recycled content is unknown

None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material

Nested Method / Product Threshold Substances listed within each material per threshold indicated per product

Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.

CLASSIFICATION: 06 05 13

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Versatile, practical and beautiful, Compact is a structural, two-sided laminate that provides endless creative possibilities for fixtures and furniture in commercial, institutional & hospitality settings that stand up to heat and humidity. It consist of multiple ply's of kraft paper saturated with phenolic resin solids to form the core base Laminate surfaces consist of papers saturated with melamine resin solids.

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
Basic Method

Threshold Disclosed Per

- Material
Product

Threshold level

- 100 ppm
1,000 ppm
Per GHS SDS
Per OSHA MSDS
Other

Residuals/Impurities

- Considered
Partially Considered
Not Considered

Explanation(s) provided for Residuals/Impurities?
Yes No

Are All Substances Above the Threshold Indicated:

Characterized Percent Weight and Role Provided?
Yes No

Screened Using Priority Hazard Lists with Results Disclosed?
Yes No

Identified Name and Identifier Provided?
Yes No

CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen Benchmark or List translator Score..... LT-P1
Nanomaterial..... No

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

COMPACT [KRAFT PAPER NoGS PHENOLIC RESIN LT-P1 | RES
DECORATIVE SURFACE LAYER NoGS MELAMINE RESIN LT-UNK]

INVENTORY AND SCREENING NOTES:

Ranges for substances' percent weight are provided.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE See Section 3 for additional listings.

Formaldehyde content: GreenGuard - Gold (previously Children & Schools)
Sustainable forestry: FSC Certification - Chain of Custody (COC)

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed

Third Party Verified?

- Yes
No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2018-03-15
PUBLISHED DATE: 2018-03-15
EXPIRY DATE: 2021-03-15

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

COMPACT

PRODUCT THRESHOLD: 100 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals are tested by UL environment on a quarterly basis and Greenguard Gold certificate is achieved for Total VOC on all Formica Grades including Compact.

OTHER PRODUCT NOTES: Formica HPL are layers of paper saturated with phenolic resins for the core and melamine resins for the surface décor sheets. They are pressed under high pressure and 300 deg F temperatures. The monomers and polymers react under these conditions thus polymerizing into a thermoset hard resin system. The residuals are a very small fraction of the unreacted monomers and are less than 7.3 parts per billion under the Greenguard test protocol.mentioned in this HPD.

KRAFT PAPER

ID: 65996-61-4

%: **66.0000 - 74.0000** GS: **NoGS** RC: **PreC** NANO: **No** ROLE: **Core structural layer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Pre consumer content 12%

PHENOLIC RESIN

ID: 9003-35-4

%: **22.0000 - 24.0000** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Polymeric core sheet binder**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagen (Rs) - sensitizer-induced

SUBSTANCE NOTES: Used to saturate kraft paper prior to pressing and curing operation.

DECORATIVE SURFACE LAYER

ID: Undisclosed

%: **0.6000 - 6.3000** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Decorative surface layer**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Used to impart design and protective surface to Compact.

GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Polymeric surface binder sheet**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Used to saturate decorative and protective surface sheets prior to pressing and curing operation.

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

FORMALDEHYDE CONTENT GreenGuard - Gold (previously Children & Schools)

CERTIFYING PARTY: Third Party	ISSUE DATE: 2007-04-30	EXPIRY DATE: 2018-10-28	CERTIFIER OR LAB: UL Environment Greenguard
APPLICABLE FACILITIES: St. Jean Canada			
CERTIFICATE URL: http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/emissions-and-greenguard			

CERTIFICATION AND COMPLIANCE NOTES: Certification is renewed on an annual basis. The renew cycle date is October 28th. Formica laminates have been evaluated under the GREENGUARD certification program since 2007 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 V1.2-2007 using a Classroom Environment

SUSTAINABLE FORESTRY FSC Certification - Chain of Custody (COC)

CERTIFYING PARTY: Third Party	ISSUE DATE: 2015-06-04	EXPIRY DATE: 2020-06-04	CERTIFIER OR LAB: SCS
APPLICABLE FACILITIES: St Jean, Canada			
CERTIFICATE URL: http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/fsc-certified-wood			

CERTIFICATION AND COMPLIANCE NOTES: FSC is an independent, non-government, not-for-profit organization established to promote responsible forest management practices worldwide. It was created out of concern for the loss of the world's forests and failure to address deforestation. FSC forest management certification is awarded to forest managers who adopt practices that provide environmental, social and economic benefits. FSC Principles and Criteria provide a foundation for all forest management standards globally.

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

Z-CLIP OR FRENCH CLEAT FASTENERS

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Necessary when used as an interior vertical panel

Section 5: General Notes

Formica brand laminates have been evaluated under the GREENGUARD certification program since 2007 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 V1.2-2007 using a Classroom Environment. A generic EPD is available at <http://www.formica.com/en/us/landing-pages/sustainability-2017/sustainability17/leed>.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **Formica**

ADDRESS: **10155 Reading Rd**

Cincinnati Ohio 45241, USA

WEBSITE: **<http://www.formica.com/en/us>**

CONTACT NAME: **Dave Swenson**

TITLE: **Sales Tech Services**

PHONE: **513 786 3536**

EMAIL: **dave.swenson@formica.com**

KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet

GHS SDS Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)

REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin

sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)

BM-3 Benchmark 3 (use but still opportunity for improvement)

BM-2 Benchmark 2 (use but search for safer substitutes)

BM-1 Benchmark 1 (avoid - chemical of high concern)

BM-U Benchmark Unspecified (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1

LT-1 List Translator Likely Benchmark 1

LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)

NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)

PostC Postconsumer

Both Both Preconsumer and Postconsumer

Unk Inclusion of recycled content is unknown

None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material

Nested Method / Product Threshold Substances listed within each material per threshold indicated per product

Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology

Third Party Verified Verification by independent certifier approved by HPDC

Preparer Third party preparer, if not self-prepared by manufacturer

Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- *a method for the assessment of exposure or risk associated with product handling or use,*
- *a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.

RECYCLED CONTENT ISO 14021-1999



FORMICA CORPORATION

Cincinnati, Ohio 45241



Formica® brand decorative compact laminates manufactured in North America contain 12% post-consumer recycled wood fiber content as determined in accordance with ISO Standard 14021.

The certified product grades are Compact Laminates.

International Standard ISO 14021-1999, Environmental Labels and Declarations (Type II environmental labeling), specifies requirements for self-declared environmental claims, regarding products, including statements, symbols and graphics, regarding products. It further describes selected terms commonly used in environmental claims and gives qualifications for their use. It also describes a general evaluation and verification methodology for self-declared environmental claims and specific evaluation and verification methods for the selected claims.

ISO 14021-1999 is a referenced standard for Recycled Content MR Credit 4 in LEED 2009 Reference Guide for Green Interior Design and Construction and Green Building Design and Construction, which incorporates guidance for new construction projects for three LEED rating systems: LEED 2009 for New Construction and Major Renovations, LEED 2009 for Schools and New Construction and Major Renovations and LEED 2009 for Core & Shell Development.

Recycled content can change over time due to new guidelines, operating conditions, suppliers and availability of raw materials. Please visit www.formica.com, which is the only authorized source for current technical information on Formica® brand products.

Issue Date: March 2016

CERTIFICATE OF COMPLIANCE



Formica Corporation

Formica® Brand Laminate

1769-420

Certificate Number

04/30/2007 - 10/28/2021

Certificate Period

Certified

Status

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

Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr^{-1} and a loading of 94.60 m^2 .

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



Formica Corporation

Formica® Brand Laminate

1769-410
Certificate Number

10/28/2004 - 10/28/2021
Certificate Period

Certified
Status

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

Wall finishes are determined compliant using an Office Environment with an air change of 0.68 hr^{-1} and a loading of 33.40 m^2 .
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).



SCS Global Services does hereby certify that an independent audit has been completed and conformity to the applicable standard(s) has been confirmed for:

Formica Corporation

10155 Reading Road, Cincinnati, OH 45241, United States
Please see addendum for additional certified locations.

This multi-site certificate covers the production and distribution of high pressure decorative laminates, metalized paperboard laminates, and specialty paper using the transfer, percentage, and credit systems. The certificate also covers the purchase and sale of FSC Controlled Wood.

The facility(s) are hereby Chain of Custody certified to sell products as:

FSC Mix, FSC Controlled Wood

The assessment has been conducted by SCS Global Services in accordance with the protocols of the Forest Stewardship Council® A.C. (FSC®).

FSC Standard: FSC-STD-40-003; FSC-STD-40-004; FSC-STD-50-001

Certificate Code: SCS-COC-003270 Trademark License Code: FSC-C092610

CW Code: SCS-CW-003270

Valid from: 4 June 2015 Expiry date: 3 June 2021

This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC-certified (or FSC Controlled Wood where applicable). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on sales and delivery documents. The scope of this certificate is considered accurate on the date of issuance. The current validity and scope, including the full list of products, shall be verified on <http://info.fsc.org>. The certificate shall remain the property of SCS, and this certificate and all copies or reproductions of this certificate shall be returned to SCS immediately upon request. Where a certificate covers more than one site, the covered products and processes/ activities are performed by the network of Participating Sites, and not necessarily by each of them.



The mark of
responsible forestry



Maggie Schwartz, Director, Chain of Custody
SCS Global Services
2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

SCSglobal
SERVICES

SCS Global Services does hereby certify that an independent audit has been completed and conformity to the applicable standard(s) has been confirmed for:

Formica Corporation

10155 Reading Road, Cincinnati, OH 45241, United States
Please see addendum for additional certified locations.

This multi-site certificate covers the production and distribution of high pressure decorative laminates, metalized paperboard laminates, and specialty paper using the transfer, percentage, and credit systems. The certificate also covers the purchase and sale of FSC Controlled Wood.

The facility(s) are hereby Chain of Custody certified to sell products as:

FSC Mix, FSC Controlled Wood

The assessment has been conducted by SCS Global Services in accordance with the protocols of the Forest Stewardship Council® A.C. (FSC®).

FSC Standard: FSC-STD-40-003; FSC-STD-40-004; FSC-STD-50-001

Certificate Code: SCS-COC-003270 Trademark License Code: FSC-C092610

CW Code: SCS-CW-003270

Valid from: 4 June 2015 Expiry date: 3 June 2021

This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC-certified (or FSC Controlled Wood where applicable). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on sales and delivery documents. The scope of this certificate is considered accurate on the date of issuance. The current validity and scope, including the full list of products, shall be verified on <http://info.fsc.org>. The certificate shall remain the property of SCS, and this certificate and all copies or reproductions of this certificate shall be returned to SCS immediately upon request. Where a certificate covers more than one site, the covered products and processes/ activities are performed by the network of Participating Sites, and not necessarily by each of them.



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responsible forestry



A handwritten signature in black ink, appearing to read "M. Schwartz", is written over a horizontal line.

Maggie Schwartz, Director, Chain of Custody
SCS Global Services
2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

SCSglobal
SERVICES