Contraflam® 45 Fire-Rated Clear Laminated/Tempered Safety **Glass by Vetrotech Saint-Gobain**

Health Product Declaration v2.0

created via: HPDC Online Builder

CLASSIFICATION:

ADVANCED SAFETY GLASS FEATURES TOGETHER WITH A HIGH DEGREE OF FLEXIBILITY. IT CONTAINS AN INTERLAYER THAT BECOMES OPAQUE IN THE EVENT OF FIRE AND ACTS AS A HEAT SHIELD INSULATING AGAINST THE FIRE FOR 45 MINUTES.



CONTENT

Section 1: Summary

INVENTORY	Residuals and	Based on the selected Content Inventory Threshold:		
Threshold per material	impurities considered in	CharacterizedAre the Percent Weight and Role provided for all substances?	⊙ Yes	O No
● 100 ppm ● 1,000 ppm ● Per GHS SDS	0 of 5 materials • see Section 2: Material Notes	Screened Are all substances screened using Priority Hazard Lists with results disclosed?	• Yes	O No
Per OSHA MSDS Other	See Section 5: General Notes	IdentifiedAre all substances disclosed by Name (Specific or Generic) and Identifier?	O 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

FLOAT GLASS [GLASS / MINERAL FIBER LT-UNK] INTERLAYER [UNDISCLOSED LT-UNK UNDISCLOSED BM-1 | MAM | DEV | END] CONTRAFLAM LAMINATION [ETHYLENE VINYL ACETATE POLYMER (EVA) LT-UNK] SEALANT [1-PROPENE, 2-METHYL-, HOMOPOLYMER LT-UNK] SECONDARY SEALANT [LIMESTONE; CALCIUM CARBONATE LT-UNK ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800 LT-UNK MANGANESE DIOXIDE LT-UNK | MAM THIRAM LT-P1 | MAM | EYE | SKI | AQU | END | MUL]

Number of Greenscreen BM-4/BM3 contents..... 0 Contents highest concern GreenScreen Benchmark or List translator Score..... BM-1 Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

CERTIFICATIONS AND COMPLIANCE

VOC Content data is not applicable for this product category.

No certifications have been added to this HPD.

O Self-Published*

VERIFIER:

SCREENING DATE: July 6, 2016

EXPIRY DATE*: July 6. 2019

VERIFICATION #:

RELEASE DATE: July 6, 2016

MAMMALIAN

DEVELOPMENTAL

DEVELOPMENTAL

Section 2: Content in Descending Order of Quantity

This section lists materials in a product and the substances in each material based on the Inventory Threshold for each material. If residuals or impurities from the manufacturing or extraction processes are considered for a material, these are inventoried and characterized to the extent described in the Material and/or General Notes. Chemical substances are screened against the HPD Priority Hazard Lists for human and environmental health impacts. Screening is based on best available information; "Not Found" does not necessarily mean there is no potential hazard associated with the product or its contents. More information about Priority Hazard Lists and the GreenScreen can be found online: www.hpd-collaborative.org and www.greenscreenchemicals.org.

entory Threshold: 100 ppm terial Notes:	%: 74.3000 HPD URL: n Residuals Considered: No			
GLASS / MINERAL FIB	ER		ID: 65997-17-3	
%: 100.0000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Fire-resistant safety glass
HAZARDS:			AGENCY(IES) WITH WARNINGS:	
None Found			No warnings found on HPD Priority lists	
SUBSTANCE NOTES:				
TERLAYER entory Threshold: Per OSH terial Notes:	%: 21.6000 HPD HA MSDS Residuals Consider			
entory Threshold: Per OSH			NANO: NO	ROLE: Fire Protection
entory Threshold: Per OSH terial Notes: UNDISCLOSED	HA MSDS Residuals Consider	red: No	NANO: NO AGENCY(IES) WITH WARNINGS:	ROLE: Fire Protection
entory Threshold: Per OSH terial Notes: UNDISCLOSED %: 95.0000 - 96.0000	HA MSDS Residuals Consider	red: No		ROLE: Fire Protection
entory Threshold: Per OSH terial Notes: UNDISCLOSED %: 95.0000 - 96.0000 HAZARDS:	HA MSDS Residuals Consider	red: No	AGENCY(IES) WITH WARNINGS:	ROLE: Fire Protection
entory Threshold: Per OSH terial Notes: UNDISCLOSED %: 95.0000 - 96.0000 HAZARDS: None Found	HA MSDS Residuals Consider	red: No	AGENCY(IES) WITH WARNINGS:	ROLE: Fire Protection
entory Threshold: Per OSH terial Notes: UNDISCLOSED %: 95.0000 - 96.0000 HAZARDS: None Found SUBSTANCE NOTES:	HA MSDS Residuals Consider	red: No	AGENCY(IES) WITH WARNINGS:	ROLE: Fire Protection ROLE: Antifreeze

US NIH - Reproductive & Developmental

EU - R-phrases

Monographs

CA EPA - Prop 65

R22 - Harmful if Swallowed

Clear Evidence of Adverse Effects -

Developmental toxicity

Developmental Toxicity

ENDOCRINE TEDX - Potential Endocrine Disruptors Potential Endocrine Disruptor

SUBSTANCE NOTES:

CONTRAFLAM LAMINATION %: 1.8000 HPD URL:

Inventory Threshold: Per OSHA MSDS Residuals Considered: No

Material Notes: In compliance with LEED v4, all ingredients within 1000 ppm of the product, not of each material, are disclosed.

ETHYLENE VINYL ACETATE POLYMER (EVA)

ID: 24937-78-8

%: 95.0000 - 100.0000 GS: LT-UNK RC: None NANO: NO ROLE: Protective

Lamination

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SEALANT %: 1.2000 HPD URL:

Inventory Threshold: Per OSHA MSDS Residuals Considered: No

Material Notes: In compliance with LEED v4, all ingredients within 1000 ppm of the product, not of each material, are disclosed.

1-PROPENE, 2-METHYL-, HOMOPOLYMER ID: 9003-27-4

%: 90.0000 - 100.0000 GS: LT-UNK RC: None NANO: NO ROLE: Insulating glass

sealant

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES:

SECONDARY SEALANT %: 1.2000 HPD URL:

Inventory Threshold: Per OSHA MSDS Residuals Considered: No

Material Notes:

LIMESTONE; CALCIUM CARBONATE ID: 1317-65-3

%: 45.8000 - 91.6000 GS: LT-UNK RC: None NANO: NO ROLE: Filler

HAZARDS: AGENCY(IES) WITH WARNINGS:

None Found No warnings found on HPD Priority lists

SUBSTANCE NOTES: The range provided is the range provided by the supplier.

ALIPHATIC POLYSULFI	DE-POLYMERS, MOLEC	CULAR WEIGHT >=1800	ID: 68611-	50-7	
%: 22.8900 - 45.7900	GS: LT-UNK	RC: None	NANO: NO	ROLE: Insulating glass sealant	
HAZARDS:		AGEN	CY(IES) WITH WARNINGS	:	
None Found		No war	nings found on HPD Priority	/ lists	
SUBSTANCE NOTES: T	he range provided is the	range provided by the supp	lier.		
MANGANESE DIOXIDE			ID: 1313-1	3-9	
%: 1.3000 - 2.1000	GS: LT-UNK	RC: None	NANO: NO	ROLE: Curing agent	
HAZARDS:		AGEN	CY(IES) WITH WARNINGS	:	
MAMMALIAN	EU - R-phrases	5	R20 - Harmful by dust/mist)	Inhalation (gas or vapor or	
MAMMALIAN	EU - R-phrases	5	R22 - Harmful if S	Swallowed	
SUBSTANCE NOTES: The range provided is the range provided by the supplier.					
THIRAM			ID: 137-26	-8	
%: 0.0000 - 0.4200	GS: LT-P1	RC: None	NANO: NO	ROLE: Fungicide	
HAZARDS:		AGEN	CY(IES) WITH WARNINGS	:	
MAMMALIAN	EU - R-phrases	5	R20 - Harmful by dust/mist)	Inhalation (gas or vapor or	
MAMMALIAN	EU - R-phrases	S	R22 - Harmful if S	Swallowed	
EYE IRRITATION	EU - R-phrases	3	R36 - Irritating to	eyes	
SKIN IRRITATION	EU - R-phrases	3	R38 - Irritating to	skin	
SKIN SENSITIZE	EU - R-phrases	5	R43 - May cause	sensitization by skin contact	
ORGAN TOXICANT	EU - R-phrases			erious damage to health by	
	·	3	R48: Danger of s prolonged expos	erious damage to health by	
ORGAN TOXICANT	EU - R-phrases	3	R48: Danger of s prolonged expose R50 - Very Toxic	to Aquatic Organisms	
ORGAN TOXICANT ACUTE AQUATIC	EU - R-phrases	s ndocrine Disrupters	R48: Danger of s prolonged exposi R50 - Very Toxic Category 1 - In vi Disruption Activit	to Aquatic Organisms	

SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN IRRITATION	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
ENDOCRINE	ChemSec - SIN List	Endocrine Disruption
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization

SUBSTANCE NOTES: This range is provided by the supplier. This substance is used to resist fungus and other organism growth.



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.



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.



E Section 5: General Notes

MANUFACTURER INFORMATION

MANUFACTURER: Vetrotech Saint-Gobain

ADDRESS: 2108B Street, Suite 110

Auburn, WA 98001

USA

WEBSITE: www.vetrotechusa.com

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KEY

OSHA MSDS Occupational Safety and Health Administration Material Safety Data Sheet

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

Hazard Types

AQU Aquatic toxicity GLO Global warming

CAN Cancer MAM Mammalian/systemic/organ toxicity

DEV Developmental toxicity
END Endocrine activity
EYE Eye irritation/corrosivity

MUL Multiple hazards
NEU Neurotoxicity
OZO Ozone depletion

GEN Gene mutation 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 Unspeci ed (insu cient 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)
UNK 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

Nano Composed of nanoscale particles or nanotechnology

Declaration Level

Self-declared Manufacturer's self-declaration (First Party)

Independent Lab Manufacturer's self-declaration using results from an independent lab

Second Party Verification by trade association or other interested party

Third Party Verification by independent certifier

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 does not provide an assessment of health impacts throughout the product life cycle. It does not provide an assessment of exposure or risk associated with product handling or use. It also does not address potential health impacts of: (i) substances used or created during the manufacturing process unless they remain in the nal product, or (ii) substances created after the product is delivered for end use (e.g., if the product burns, degrades, or otherwise changes chemical composition).

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

A disclosure completed in compliance with the HPD Open Standard is referred to as a "Health Product Declaration," or "HPD." The product manufacturer and any applicable independent veri er are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD Open Standard noted.