

CLASSIFICATION: 08 88 13 Fire-Resistant Glazing

PRODUCT DESCRIPTION: 45 to 120 minute fire resistant glazing (as tested according to ASTM E119 / NFPA 251 / UL 263); Maximum fire and impact safety with hose stream and full radiant heat protection; Fully tested, approved and listed for temperature rise doors, openings and wall applications; Tint-free and optically clear; Acoustical value of 40-44 STC; Available in any custom architectural make-up, such as laminated glass and energy-saving insulated units with NFRC certifications when used with GPX Framing; Can be customized to include noise abatement benefits, bullet resistance, hurricane resistance, and unlimited decorative finish options; Available with Starphire® Ultra-Clear Glass by PPG; 5 year warranty; USA manufactured for fast lead times and competitive pricing.

Section 1: Summary

Nested Method / Material 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

Residuals/Impurities
Considered in 0 of 3 Materials

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

CLEAR TEMPERED GLASS - SUPERLITE II-XL [SOLID / PLATE GLASS LT-UNK] FIRE RESISTIVE LAYER [UNDISCLOSED BM-4 UNDISCLOSED LT-1] CAN | DEL | REP | GEN | MAM | SKI | EYE | MUL UNDISCLOSED NoGS UNDISCLOSED NoGS UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-UNK UNDISCLOSED LT-PI | RES] THERMOPLASTIC SPACER [CARBON BLACK LT-1] CAN ZEOLITE LT-UNK UNDISCLOSED LT-UNK]

Number of Greenscreen BM-4/BM3 contents ... 1

Contents highest concern GreenScreen Benchmark or List translator Score ... LT-1

Nanomaterial ... No

INVENTORY AND SCREENING NOTES:

This product contains FLOAT GLASS for which there is no CAS number. However, per direction from the HPDC Technical Committee this report uses the CAS number for solid/plate glass. The only material not identified is the proprietary fire resistive layer which has been screened.

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: N/A

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

- Yes
 No

PREPARER: Self-Prepared

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2019-07-11

PUBLISHED DATE: 2019-07-11

EXPIRY DATE: 2022-07-11



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 2.1.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-1-standard

CLEAR TEMPERED GLASS - SUPERLITE II-XL

#: 60.00 - 70.00

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: This product contains FLOAT GLASS which is considered a Special Condition by the HPDC Technical Committee. for which guidelines have not yet been developed. All process chemistry for the clear tempered glass product occurs within the factory. While this product has not been specifically tested for residuals, it is expected that no residuals remain from these process chemistry reactions.

OTHER MATERIAL NOTES:

SOLID / PLATE GLASS

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-11

#: 100.00 - 100.00

GS: LT-UNK

RC:

None

NANO:

No

ROLE: Clear tempered float glass encapsulating the fire resistive intumescent interlayer.

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This product contains FLOAT GLASS which is a Special Conditions materials, but following HPDC recommendations, this report uses the CAS number for solid/plate glass until Special Conditions guidelines are published.

Float glass used in this product contains approximately 20% recycled glass in the form of cullet. The float glass manufacturing process recycles virtually all the glass waste from the in-plant production melting and cutting processes. This broken glass, known as cullet, is reintroduced with the raw materials batch mix in the furnace as an aid to melting. It takes approximately half the amount of energy to produce glass from cullet as it does to produce glass from raw materials.

FIRE RESISTIVE LAYER

#: 20.00 - 35.00

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: All process chemistry for the clear tempered glass product occurs within the factory. While this product has not been specifically tested for residuals, it is expected that no residuals remain from these process chemistry reactions. The final product is sealed and does not pose any hazard to building occupants. This proprietary fire resistive intumescent interlayer has been tested in its combined state and did not exhibit hazardous waste characteristics for ignitability, corrosivity, reactivity, or toxicity.

OTHER MATERIAL NOTES: This proprietary fire resistive intumescent interlayer is composed of several components (listed below) that when combined in the final product is sealed and encapsulated within the glass layers.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-07-11**%: **70.00 - 80.00** GS: **BM-4** RC: **None** NANO: **No** ROLE: **Fire resistive intumescent interlayer - component 1**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSEDHAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-07-11**%: **8.00 - 12.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Proprietary fire resistive intumescent interlayer - component 2**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US EPA - IRIS Carcinogens	(2005) Likely to be Carcinogenic to humans
CANCER	IARC	Group 2a - Agent is probably Carcinogenic to humans
CANCER	CA EPA - Prop 65	Carcinogen
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	US NIH - Report on Carcinogens	Reasonably Anticipated to be Human Carcinogen
CANCER	EU - SVHC Authorisation List	Carcinogenic - Candidate list
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
REPRODUCTIVE	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Reproductive Toxicity
GENE MUTATION	EU - SVHC Authorisation List	Mutagenic - Candidate list
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
GENE MUTATION	EU - GHS (H-Statements)	H340 - May cause genetic defects
CANCER	EU - GHS (H-Statements)	H350 - May cause cancer
REPRODUCTIVE	EU - GHS (H-Statements)	H361f - Suspected of damaging fertility
ORGAN TOXICANT	EU - GHS (H-Statements)	H372 - Causes damage to organs through prolonged or repeated exposure
CANCER	EU - REACH Annex XVII CMRs	Carcinogen Category 2 - Substances which should be regarded as if they are Carcinogenic to man

GENE MUTATION	EU - REACH Annex XVII CMRs	Mutagen Category 2 - Substances which should be regarded as if they are Mutagenic to man
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters
CANCER	MAK	Carcinogen Group 2 - Considered to be carcinogenic for man
SKIN SENSITIZE	MAK	Sensitizing Substance Sh - Danger of skin sensitization
CANCER	EU - Annex VI CMRs	Carcinogen Category 1B - Presumed Carcinogen based on animal evidence
GENE MUTATION	EU - Annex VI CMRs	Mutagen - Category 1B
GENE MUTATION	MAK	Germ Cell Mutagen 2
REPRODUCTIVE	CA EPA - Prop 65	Reproductive Toxicity - Male
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
MAMMALIAN	US EPA - EPCRA Extremely Hazardous Substances	Extremely Hazardous Substances
CANCER	Korea - GHS	Carcinogenicity - Category 1 [H350 - May cause cancer]
GENE MUTATION	Korea - GHS	Germ cell mutagenicity - Category 1 [H340 - May cause genetic defects]
GENE MUTATION	New Zealand - GHS	6.6A - Known or presumed human mutagens
CANCER	New Zealand - GHS	6.7A - Known or presumed human carcinogens
CANCER	Japan - GHS	Carcinogenicity - Category 1B
GENE MUTATION	Japan - GHS	Germ cell mutagenicity - Category 1B
REPRODUCTIVE	Japan - GHS	Toxic to reproduction - Category 1B
GENE MUTATION	Malaysia - GHS	H340 - May cause genetic defects
CANCER	Malaysia - GHS	H350 - May cause cancer
GENE MUTATION	Australia - GHS	H340 - May cause genetic defects
CANCER	Australia - GHS	H350 - May cause cancer

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-07-11**

%: **3.00 - 6.00**

GS: **NoGS**

RC:
None

NANO:
No

ROLE: **Fire resistive intumescent interlayer - component 3**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-07-11**

?: **3.00 - 6.00**

GS: **NoGS**

RC: **None**

NANO: **No**

ROLE: **Fire resistive intumescent interlayer - component 4**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-07-11**

?: **2.00 - 5.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Fire resistive intumescent interlayer - component 5**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-07-11**

?: **0.00 - 1.00**

GS: **LT-UNK**

RC: **None**

NANO: **No**

ROLE: **Fire resistive intumescent interlayer - component 6**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**

HAZARD SCREENING DATE: **2019-07-11**

#: 0.00 - 1.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Fire resistive intumescent interlayer - component 7

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-11

#: 0.00 - 1.00

GS: LT-UNK

RC: None

NANO: No

ROLE: Fire resistive intumescent interlayer - component 8

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

UNDISCLOSED

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2019-07-11

#: 0.00 - 1.00

GS: LT-P1

RC: None

NANO: No

ROLE: Fire resistive intumescent interlayer - component 9

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

RESPIRATORY

AOEC - Asthmagens

Asthmagen (G) - generally accepted

SUBSTANCE NOTES: This substance is part of the fire resistive layer. Its name is not disclosed because it is part of a proprietary system. It has been fully screened.

THERMOPLASTIC SPACER

#: 5.00 - 10.00

MATERIAL THRESHOLD: Per OSHA MSDS

RESIDUALS AND IMPURITIES CONSIDERED: No

RESIDUALS AND IMPURITIES NOTES: Residuals and impurities are not considered due to limited information available from the supplier.

OTHER MATERIAL NOTES: Information on substances limited by information provided by supplier. The thermoplastic spacer is used to create the cavity for the fire resistive interlayer. The final product is sealed and does not pose any hazard to building occupants.

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-07-11**

#: **20.00 - 30.00** GS: **LT-1** RC: **None** NANO: **No** ROLE: **Thermoplastic spacer component 1 - SEE MATERIAL NOTES.**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 2B - Possibly carcinogenic to humans - inhaled from occupational sources

SUBSTANCE NOTES: The percentage range for this substance is based on information provided by the supplier SDS.

ZEOLITE

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-07-11**

#: **10.00 - 20.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Thermoplastic spacer component 2 - SEE MATERIAL NOTES.**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The percentage range for this substance is based on information provided by the supplier SDS.

UNDISCLOSED

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-07-11**

#: **0.00 - 70.00** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Thermoplastic spacer component 3 - SEE MATERIAL NOTES.**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
None found		No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Specific proportions of this proprietary substance are not available from the supplier.

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

N/A

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-05-17**

EXPIRY DATE:

CERTIFIER OR LAB: **self**

APPLICABLE FACILITIES: **All. This product has not been certified because it is an Inherently non-emitting source per LEED®.**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **This product has not been certified because it is an Inherently non-emitting source per LEED®.**

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.

GPX FRAMING - UNFINISHED

HPD URL: https://hpdrepository.hpd-collaborative.org/repository/HPDs/publish_163_GPX_Framing_unfinished.pdf

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

SuperLite II-XL glazing is typically used in conjunction with GPX Framing, though other framing systems can be used.

Section 5: General Notes

SuperLite II-XL is listed and labeled by Intertek/Warnock-Hersey Inc. and Underwriters Laboratories

MANUFACTURER INFORMATION

MANUFACTURER: **SAFTI FIRST**ADDRESS: **100 N Hill Drive****Suite 12****Brisbane CA 94005, United States**WEBSITE: <http://safti.com/product/superlite-ii-xl-45/><http://safti.com/product/superlite-ii-xl-60/><http://safti.com/product/superlite-ii-xl-90/><http://safti.com/product/superlite-ii-xl-120/>CONTACT NAME: **Diana San Diego**TITLE: **VP of Marketing**PHONE: **888-653-3333**EMAIL: **DianaS@safti.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.