

Pilkington Pyrostop® and Pilkington Pyrodur® fire-rated insulating glass (PVB, Silicone) by NSG Group

Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 20369

CLASSIFICATION: 08 88 13 Fire resistant glazing

PRODUCT DESCRIPTION: Fire-rated architectural glazing, made from sheets of soda-lime-silica flat glass and layers of fire-resistant material. The glazing contains an impact-resistant PVB layer. The components are combined into an Insulating Glass Unit with a silicone secondary sealant. (Note that the CAS number for the glass component includes all types of glass. This product only contains soda-lime-silica flat glass.)

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format

- Nested Materials Method
- Basic Method

Threshold level

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

Residuals/Impurities

- Considered
- Partially Considered
- Not Considered

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

One or more substances not screened using Priority Hazard Lists with results disclosed and/ or one or more Special Condition did not follow guidance.

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.

Threshold Disclosed Per

- Material
- Product

Explanation(s) provided for Residuals/Impurities?
 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

PILKINGTON PYROSTOP® AND PILKINGTON PYRODUR® FIRE-RATED INSULATING GLASS (PVB, SILICONE) [SOLID / PLATE GLASS LT-UNK SODIUM SILICATE LT-P1 | END GLYCERIN LT-UNK SILICONES NoGS STAINLESS STEEL NoGS ZEOLITES LT-UNK EDGE TAPE (POLYESTER ALUMINIUM LAMINATE) Not Screened EDGE TAPE (MESH) Not Screened POLYVINYL BUTYRAL (PRIMARY CASRN IS 63148-65-2) LT-UNK STEARIC ACID LT-P1 | END METHYLTRIMETHOXYSILANE BM-1tp 1-PROPANAMINE, 3-(TRIETHOXYSILYL)-, REACTION PRODUCTS WITH TRIMETHOXYMETHYLSILANE AND 2-[[3-(TRIMETHOXYSILYL)PROPOXY]METHYL]OXIRANE Not Screened CARBON BLACK BM-1 | CAN DODECAMETHYLCYCLOHEXASILOXANE (D6) BM-1 | PBT AMINOETHYL-AMINOPROPYL-TRIMETHOXYSILANE LT-UNK 3,3,10,10-TETRAMETHOXY-2,11-DIOXA-3,10-DISILADODECANE NoGS POLYISOBUTYLENE (PRIMARY CASRN IS 9003-27-4) LT-UNK BIS(2-BUTOXYETHYL) ADIPATE NoGS QUARTZ LT-1 | CAN OCTAMETHYLCYCLOTETRASILOXANE BM-1 | END | PBT | MUL | REP DECAMETHYLCYCLOPENTASILOXANE (D5) BM-1 | PBT | MUL | END 3-(TRIETHOXYSILYL)PROPYLAMINE LT-UNK | SKI METHYL ALCOHOL BM-1 | DEL | PHY | MAM | END | MUL | REP 1-BUTENE, POLYMER WITH ETHENE AND 1-PROPENE LT-UNK STANNANE, DIMETHYLBIS[(1-OXONEODECYL)OXY]- LT-UNK]

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:

All components.

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: CDPH standard method - not applicable

CONSISTENCY WITH OTHER PROGRAMS

No pre-checks completed or disclosed.

Third Party Verified?

Yes

No

PREPARER: **Self-Prepared**

VERIFIER:

VERIFICATION #:

SCREENING DATE: 2020-05-29

PUBLISHED DATE: 2020-06-09

EXPIRY DATE: 2023-05-29



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

PILKINGTON PYROSTOP® AND PILKINGTON PYRODUR® FIRE-RATED INSULATING GLASS (PVB, SILICONE)

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED:
Partially

RESIDUALS AND IMPURITIES NOTES: Soda lime silicate glass is 100% glass and does not contain impurities or residuals. All other data has been provided from supplier raw material MSDS and testing has not been carried out for impurities or residuals in the final components.

OTHER PRODUCT NOTES: This HPD applies to Pilkington Pyrostop® and Pilkington Pyrodur® insulating fire-rated glass with an impact-resistant PVB layer, in an IGU. It is only valid for products made at Pilkington Deutschland AG in Gelsenkirchen, because of the IGU materials used.

SOLID / PLATE GLASS

ID: 65997-17-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: 71.7000 - 89.6700

GS: LT-UNK

RC: PreC

NANO: No

SUBSTANCE ROLE: Glass component

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The product contains glass recycled in the manufacturing facility, and may contain pre- and post-consumer recycled glass.

The bulk glass is 100% soda-lime-silicate flat glass which is included in CAS number 65997-17-3. Flat glass does not contain any fiber glass or crystalline silica and therefore does not have any of the potential health risks associated with them.

The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

SODIUM SILICATE

ID: 1344-09-8

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: 5.7800 - 24.2200

GS: LT-P1

RC: None

NANO: No

SUBSTANCE ROLE: Intumescent

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Component of fire resistant layers. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

GLYCERIN

ID: 56-81-5

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: **0.7700 - 3.2500**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Intumescent**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Component of fire resistant layers. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

SILICONES

ID: **63148-53-8**

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

HAZARD SCREENING DATE: **2020-05-29**

%: **0.4300 - 1.2100**

GS: **NoGS**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Sealant**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

STAINLESS STEEL

ID: **12597-68-1**

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

HAZARD SCREENING DATE: **2020-05-29**

%: **0.1800 - 0.5200**

GS: **NoGS**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Alloy element**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Stainless steel spacer (specification available, if required). The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated

ZEOLITES

ID: **1318-02-1**

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

HAZARD SCREENING DATE: **2020-05-29**

%: **0.0900 - 0.2500**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Desiccant**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

EDGE TAPE (POLYESTER ALUMINIUM LAMINATE)

ID: **Not Registered**

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

HAZARD SCREENING DATE: **2020-05-29**

%: **0.0700 - 0.1300**

GS: **Not Screened**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Structure component**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES: Edge tape to protect the fire resistant layer from humidity.. Made from aluminium foil laminated with polyester film and acrylic adhesive. The amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

EDGE TAPE (MESH)ID: **Unknown**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

Hazard Screening not performed

SUBSTANCE NOTES: Edge tape to protect the fire resistant layer from humidity. Mesh made with PET and acrylic. The amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

POLYVINYL BUTYRAL (PRIMARY CASRN IS 63148-65-2)ID: **945754-76-7**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

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

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Component of the PVB safety glass interlayer material. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

STEARIC ACIDID: **57-11-4**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

ENDOCRINE

TEDX - Potential Endocrine Disruptors

Potential Endocrine Disruptor

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

METHYLTRIMETHOXYSILANEID: **1185-55-3**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

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

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

1-PROPANAMINE, 3-(TRIETHOXYSILYL)-, REACTION PRODUCTS WITH TRIMETHOXYMETHYLSILANE AND 2-[[3-(TRIMETHOXYSILYL)PROPOXY]METHYL]OXIRANEID: **Not Registered**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

%: 0.0046 - 0.0142

GS: Not Screened

RC: None

NANO: No

SUBSTANCE ROLE: Curing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
Hazard Screening not performed		

SUBSTANCE NOTES: CAS RN : 474530-85-3 not recognised by HPD Builder substance look up or manual CAS identifier.

EC-No. 610-348-0

CARBON BLACK

ID: 1333-86-4

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: 0.0034 - 0.0195

GS: BM-1

RC: None

NANO: No

SUBSTANCE ROLE: Pigment

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
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
CANCER	MAK	Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Component of primary and secondary seals. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

DODECAMETHYLCYCLOHEXASILOXANE (D6)

ID: 540-97-6

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: 0.0017 - 0.0067

GS: BM-1

RC: UNK

NANO: No

SUBSTANCE ROLE: Curing agent

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EU - SVHC Authorisation List	PBT - Candidate list
PBT	EU - SVHC Authorisation List	vPvB - Candidate list
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

AMINOETHYL-AMINOPROPYL-TRIMETHOXYSILANE

ID: 1760-24-3

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library

HAZARD SCREENING DATE: 2020-05-29

%: 0.0015 - 0.0060

GS: LT-UNK

RC: UNK

NANO: No

SUBSTANCE ROLE: Adhesive

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

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

3,3,10,10-TETRAMETHOXY-2,11-DIOXA-3,10-DISILADODECANE ID: 87135-01-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-29**

%: **0.0012 - 0.0044** GS: **NoGS** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

POLYISOBUTYLENE (PRIMARY CASRN IS 9003-27-4) ID: 2098184-81-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-29**

%: **0.0010 - 0.0400** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Polymer species**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: Component of primary seal. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

BIS(2-BUTOXYETHYL) ADIPATE ID: 141-18-4

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-29**

%: **0.0010 - 0.2000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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None found		No warnings found on HPD Priority Hazard Lists
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SUBSTANCE NOTES: Component of the PVB safety glass interlayer material. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

QUARTZ ID: 14808-60-7

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2020-05-29**

%: **0.0010 - 0.0020** GS: **LT-1** RC: **None** NANO: **Unknown** SUBSTANCE ROLE: **Binder**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
CANCER	IARC	Group 1 - Agent is Carcinogenic to humans
CANCER	US CDC - Occupational Carcinogens	Occupational Carcinogen
CANCER	CA EPA - Prop 65	Carcinogen - specific to chemical form or exposure route
CANCER	IARC	Group 1 - Agent is carcinogenic to humans - inhaled from occupational sources
CANCER	US NIH - Report on Carcinogens	Known to be Human Carcinogen (respirable size - occupational setting)
CANCER	MAK	Carcinogen Group 1 - Substances that cause cancer in man
CANCER	GHS - New Zealand	6.7A - Known or presumed human carcinogens
CANCER	GHS - Japan	Carcinogenicity - Category 1A [H350]
CANCER	GHS - Australia	H350i - May cause cancer by inhalation

SUBSTANCE NOTES: The quartz is a very small component of the binder in the desiccant and is sealed within the insulated glass unit.

OCTAMETHYLCYCLOTETRAILOXANE

ID: 556-67-2

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

HAZARD SCREENING DATE: **2020-05-29**

%: **0.0009 - 0.0035**

GS: **BM-1**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ENDOCRINE	EU - Priority Endocrine Disruptors	Category 1 - In vivo evidence of Endocrine Disruption Activity
PBT	EU - ESIS PBT	Under PBT evaluation
PBT	EU - SVHC Authorisation List	PBT - Candidate list
PBT	EU - SVHC Authorisation List	vPvB - Candidate list
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - Action Plan in development
REPRODUCTIVE	EU - GHS (H-Statements)	H361f - Suspected of damaging fertility
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
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
RESTRICTED LIST	US EPA - PPT Chemical Action Plans	TSCA Work Plan chemical - ongoing chemical (risk) assessment

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

DECAMETHYLCYCLOPENTASILOXANE (D5)

ID: 541-02-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

%: **0.0007 - 0.0025** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Curing agent**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
PBT	EU - ESIS PBT	Under PBT evaluation
PBT	EU - SVHC Authorisation List	PBT - Candidate list
PBT	EU - SVHC Authorisation List	vPvB - Candidate list
PBT	OR DEQ - Priority Persistent Pollutants	Priority Persistent Pollutant - Tier 1
PBT	EC - CEPA DSL	Persistent, Bioaccumulative and inherently Toxic (PBiTE) to the Environment (based on aquatic organisms)
MULTIPLE	ChemSec - SIN List	CMR - Carcinogen, Mutagen &/or Reproductive Toxicant
PBT	ChemSec - SIN List	PBT / vPvB (Persistent, Bioaccumulative, & Toxic / very Persistent & very Bioaccumulative)
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

3-(TRIETHOXYSILYL)PROPYLAMINE

ID: 919-30-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

%: **0.0003 - 0.0011** GS: **LT-UNK** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Adhesive**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

METHYL ALCOHOL

ID: 67-56-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-29**

%: **0.0003 - 0.0010** GS: **BM-1** RC: **UNK** NANO: **No** SUBSTANCE ROLE: **Residual**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
DEVELOPMENTAL	CA EPA - Prop 65	Developmental toxicity
DEVELOPMENTAL	US NIH - Reproductive & Developmental Monographs	Clear Evidence of Adverse Effects - Developmental Toxicity
PHYSICAL HAZARD (REACTIVE)	EU - GHS (H-Statements)	H225 - Highly flammable liquid and vapour
MAMMALIAN	EU - GHS (H-Statements)	H301 - Toxic if swallowed
MAMMALIAN	EU - GHS (H-Statements)	H311 - Toxic in contact with skin
MAMMALIAN	EU - GHS (H-Statements)	H331 - Toxic if inhaled
ORGAN TOXICANT	EU - GHS (H-Statements)	H370 - Causes damage to organs
ENDOCRINE	TEDX - Potential Endocrine Disruptors	Potential Endocrine Disruptor
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
REPRODUCTIVE	GHS - Japan	Toxic to reproduction - Category 1B [H360]

SUBSTANCE NOTES: Residual component of cured silicone secondary sealant. The relative amount of the substance in the product is exceptionally low and depends on the size and thickness of the unit. A typical range is indicated.

1-BUTENE, POLYMER WITH ETHENE AND 1-PROPENE

ID: 25895-47-0

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

HAZARD SCREENING DATE: **2020-05-29**

#: **0.0001 - 0.0030**

GS: **LT-UNK**

RC: **None**

NANO: **No**

SUBSTANCE ROLE: **Polymer species**

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

SUBSTANCE NOTES: Component of primary seal. The relative amount of the substance in the product depends on the size of the unit. A typical range is indicated.

STANNANE, DIMETHYLBIS[(1-OXONEODECYL)OXY]-

ID: 68928-76-7

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

HAZARD SCREENING DATE: **2020-05-29**

#: **0.0001 - 0.0002**

GS: **LT-UNK**

RC: **UNK**

NANO: **No**

SUBSTANCE ROLE: **Curing agent**

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

SUBSTANCE NOTES: Component of silicone secondary sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

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

CDPH standard method - not applicable

CERTIFYING PARTY: **Self-declared**

ISSUE DATE: **2019-10-09**

EXPIRY DATE: **2021-10-09**

CERTIFIER OR LAB: **Self-certified**

APPLICABLE FACILITIES: **All.**

CERTIFICATE URL:

CERTIFICATION AND COMPLIANCE NOTES: **According to LEED v4, sealed units are exempt from CDPH requirements for testing VOC emissions.**

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.

No accessories are required for this product.

Section 5: General Notes

This HPD is for fire-rated glazing made from sheets of soda-lime-silica glass with a PVB impact-resistant layer, manufactured into a Insulating Glass Unit with a silicone secondary sealant.



MANUFACTURER INFORMATION

MANUFACTURER: **NSG Group**
 ADDRESS: **Pilkington Deutschland AG**
Haydnstrasse 19
Gelsenkirchen North Rhine-Westphalia 45884,
Germany
 WEBSITE: **www.nsg.com**

CONTACT NAME: **Martin Neifer**
 TITLE: **Operations Director Fire Protection Glass**
 PHONE: **0049 209 1668 3800**
 EMAIL: **Martin.Neifer@nsg.com**

The listed contact is responsible for the validity of this HPD and attests that it is accurate and complete to the best of his or her knowledge.

KEY

Hazard Types

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

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)	LT-1 List Translator 1 (Likely Benchmark-1)
BM-3 Benchmark 3 (use but still opportunity for improvement)	LT-UNK List Translator Benchmark Unknown (the chemical is present on at least one GreenScreen Specified List, but the information contained within the list did not result in a clear mapping to a LT-1 or LTP1 score.)
BM-2 Benchmark 2 (use but search for safer substitutes)	NoGS No GreenScreen.
BM-1 Benchmark 1 (avoid - chemical of high concern)	
BM-U Benchmark Unspecified (due to insufficient data)	
LT-P1 List Translator Possible 1 (Possible Benchmark-1)	

Recycled Types

PreC Pre-consumer recycled content
PostC Post-consumer recycled content
UNK Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms:

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

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.