

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

## Health Product Declaration v2.2

created via: HPDC Online Builder

HPD UNIQUE IDENTIFIER: 20368

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. (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 Disclosed Per

- Material  
 Product

#### Threshold level

- 100 ppm  
 1,000 ppm  
 Per GHS SDS  
 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

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.

### 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 \(PVB, POLYSULPHIDE\)](#) | [SOLID / PLATE GLASS](#) [LT-UNK](#) [SODIUM SILICATE](#) [LT-P1](#) | [END GLYCERIN](#) [LT-UNK](#) [ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800](#) [LT-P1](#) | [MUL STAINLESS STEEL](#) [NoGS](#) [CALCIUM CARBONATE](#) [BM-3](#) [ZEOLITES](#) [LT-UNK](#) [EDGE TAPE \(POLYESTER ALUMINIUM LAMINATE\)](#) [Not Screened](#) [ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800](#) [LT-P1](#) | [MUL EDGE TAPE \(MESH\)](#) [Not Screened](#) [1,2-BENZENEDICARBOXYLIC ACID, BENZYL C7-9-BRANCHED AND LINEAR ALKYL ESTERS](#) [LT-UNK](#) [POLYVINYL BUTYRAL \(PRIMARY CASRN IS 63148-65-2\)](#) [LT-UNK](#) [BIS\(2-BUTOXYETHYL\) ADIPATE](#) [NoGS](#) [POLYISOBUTYLENE \(PRIMARY CASRN IS 9003-27-4\)](#) [LT-UNK](#) [TEXANOL BENZYL PHTHALATE](#) [LT-UNK](#) [MANGANESE DIOXIDE](#) [LT-P1](#) [CARBON BLACK](#) [BM-1](#) | [CAN QUARTZ](#) [LT-1](#) | [CAN DISULFIRAM](#) [LT-P1](#) | [AQU](#) | [SKI](#) | [END](#) | [MUL 1-BUTENE, POLYMER WITH ETHENE AND 1-PROPENE](#) [LT-UNK](#) [SODIUM HYDROXIDE](#) [LT-P1](#) | [SKI](#) | [PHY DIETHYLDITHIOCARBAMIC ACID ZINC SALT](#) [LT-P1](#) | [AQU](#) | [SKI](#) | [EYE](#) | [MUL](#) ]

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

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: 2020-05-27

PUBLISHED DATE: 2020-06-09

EXPIRY DATE: 2023-05-27

## 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](http://www.hpd-collaborative.org/hpd-2-1-1-standard)

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

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: 2020-05-27

%: 71.7800 - 90.4500 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: 2020-05-27

%: 5.8300 - 24.2500 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 the 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: 2020-05-27

%: 0.7800 - 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 the 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.

### ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800

ID: 68611-50-7

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-05-27		
%: 0.3100 - 0.8900	GS: LT-P1	RC: UNK	NANO: No	SUBSTANCE ROLE: Sealant
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters		

SUBSTANCE NOTES: Polysulphide secondary sealant in total . 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: 2020-05-27		
%: 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

### CALCIUM CARBONATE

ID: 471-34-1

HAZARD SCREENING METHOD: Pharos Chemical and Materials Library		HAZARD SCREENING DATE: 2020-05-27		
%: 0.1100 - 0.4900	GS: BM-3	RC: None	NANO: No	SUBSTANCE ROLE: Filler
HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS		
None found		No warnings found on HPD Priority Hazard Lists		

SUBSTANCE NOTES: Component of polysulphide secondary seal.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: 2020-05-27		
%: 0.0750 - 0.2890	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: **2020-05-27**

%: <b>0.0700 - 0.1300</b>	GS: <b>Not Screened</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Structure component</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

SUBSTANCE NOTES: Edge tape to protect the fire resistant layer from humidity. Tape 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.

**ALIPHATIC POLYSULFIDE-POLYMERS, MOLECULAR WEIGHT >=1800**ID: **68611-50-7**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-27**

%: <b>0.0600 - 0.2500</b>	GS: <b>LT-P1</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Polymer species</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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<b>MULTIPLE</b>	German FEA - Substances Hazardous to Waters	Class 2 - Hazard to Waters
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SUBSTANCE NOTES: Component of secondary polysulphide seal. 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 (MESH)**ID: **Not Registered**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-27**

%: <b>0.0500 - 0.0800</b>	GS: <b>Not Screened</b>	RC: <b>UNK</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Structure component</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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Hazard Screening not performed

SUBSTANCE NOTES: Edge mesh to protect the fire resistant layer from humidity - 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.

**1,2-BENZENEDICARBOXYLIC ACID, BENZYL C7-9-BRANCHED AND LINEAR ALKYL ESTERS**ID: **68515-40-2**HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-27**

%: <b>0.0300 - 0.1700</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Plasticizer</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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<b>None found</b>	<b>No warnings found on HPD Priority Hazard Lists</b>	
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SUBSTANCE NOTES: Component of polysulphide secondary seal. The relative 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: **2020-05-27**

%: <b>0.0100 - 6.2200</b>	GS: <b>LT-UNK</b>	RC: <b>None</b>	NANO: <b>No</b>	SUBSTANCE ROLE: <b>Polymer species</b>
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HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
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<b>None found</b>	<b>No warnings found on HPD Priority Hazard Lists</b>	
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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.

### BIS(2-BUTOXYETHYL) ADIPATE

ID: 141-18-4

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0100 - 0.2000** GS: **NoGS** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

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.

### POLYISOBUTYLENE (PRIMARY CASRN IS 9003-27-4)

ID: 2098184-81-5

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0070 - 0.0400** 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 and thickness of the unit. A typical range is indicated.

### TEXANOL BENZYL PHTHALATE

ID: 16883-83-3

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0063 - 0.0360** GS: **LT-UNK** RC: **None** NANO: **No** SUBSTANCE ROLE: **Plasticizer**

HAZARD TYPE

AGENCY AND LIST TITLES

WARNINGS

None found

No warnings found on HPD Priority Hazard Lists

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

### MANGANESE DIOXIDE

ID: 1313-13-9

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0050 - 0.0290** GS: **LT-P1** 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 polysulphide secondary seal. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

### CARBON BLACK

ID: 1333-86-4

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0030 - 0.0140** 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 isobutyl and secondary polysulphide seals. 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: **2020-05-27**

#: **0.0010 - 0.0030** GS: **LT-1** RC: **None** NANO: **No** 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.

## DISULFIRAM

ID: 97-77-8

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

HAZARD SCREENING DATE: **2020-05-27**

#: **0.0005 - 0.0015** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Accelerator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
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: Component of polysulphide secondary seal. The relative amount of the substance in the product 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: **2020-05-27**%: **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 isobutyl sealant. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

**SODIUM HYDROXIDE**

ID: 1310-73-2

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-27**%: **0.0001 - 0.0014** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Processing regulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
SKIN IRRITATION	EU - GHS (H-Statements)	H314 - Causes severe skin burns and eye damage
PHYSICAL HAZARD (REACTIVE)	GHS - Korea	H290 - May be corrosive to metals

SUBSTANCE NOTES: Component of secondary polysulphide sealant needed for curing and might not be present in the final product. The relative amount of the substance in the product depends on the size and thickness of the unit. A typical range is indicated.

**DIETHYLDITHIOCARBAMIC ACID ZINC SALT**

ID: 14324-55-1

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library**HAZARD SCREENING DATE: **2020-05-27**%: **0.0001 - 0.0010** GS: **LT-P1** RC: **None** NANO: **No** SUBSTANCE ROLE: **Processing regulator**

HAZARD TYPE	AGENCY AND LIST TITLES	WARNINGS
ACUTE AQUATIC	EU - GHS (H-Statements)	H400 - Very toxic to aquatic life
CHRON AQUATIC	EU - GHS (H-Statements)	H410 - Very toxic to aquatic life with long lasting effects
SKIN IRRITATION	EU - GHS (H-Statements)	H315 - Causes skin irritation
SKIN SENSITIZE	EU - GHS (H-Statements)	H317 - May cause an allergic skin reaction
EYE IRRITATION	EU - GHS (H-Statements)	H319 - Causes serious eye irritation
MULTIPLE	German FEA - Substances Hazardous to Waters	Class 3 - Severe Hazard to Waters

SUBSTANCE NOTES: Component of polysulphide secondary seal. 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.



**MANUFACTURER INFORMATION**

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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**

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**Hazard Types**

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

**GreenScreen (GS)**

<b>BM-4</b> Benchmark 4 (prefer-safer chemical)	<b>LT-1</b> List Translator 1 (Likely Benchmark-1)
<b>BM-3</b> Benchmark 3 (use but still opportunity for improvement)	<b>LT-UNK</b> 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.)
<b>BM-2</b> Benchmark 2 (use but search for safer substitutes)	<b>NoGS</b> No GreenScreen.
<b>BM-1</b> Benchmark 1 (avoid - chemical of high concern)	
<b>BM-U</b> Benchmark Unspecified (due to insufficient data)	
<b>LT-P1</b> 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.*