# Pilkington Pyrostop® and Pilkington Pyrodur® monolithic fire-rated glass (with PVB) by NSG Group

**Health Product Declaration v2.1.1**
created via: HPDC Online Builder

**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. (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
- ○ 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
*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® MONOLITHIC FIRE-RATED GLASS (WITH PVB) [ SOLID / PLATE GLASS LT-UNK SODIUM SILICATE LT-P1 GLYCERIN LT-UNK TRIETHYLENE GLYCOL DI(2-ETHYLHEXOATE) (PRIMARY CASRN IS 94-28-0) LT-UNK EDGE TAPE Not Screened POLYVINYL BUTYRAL (PRIMARY CASRN IS 63148-65-2) LT-UNK BIS(2-BUTOXYETHYL) ADIPATE 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:**
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: 2019-10-08
PUBLISHED DATE: 2020-03-12
EXPIRY DATE: 2022-10-08

# 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® MONOLITHIC FIRE-RATED GLASS (WITH PVB)

PRODUCT THRESHOLD: Per GHS SDS

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: All components considered in this product.

OTHER PRODUCT NOTES: This HPD applies to Pilkington Pyrostop® and Pilkington Pyrodur® monolithic fire-rated glass with an impact-resistant PVB layer.

### SOLID / PLATE GLASS

ID: 65997-17-3

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-08**

%: **71.20 - 82.60** GS: **LT-UNK** RC: **Both** NANO: **No** ROLE: **Bulk glass**

| 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 fibre 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 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: **2019-10-08**

%: **14.10 - 23.00** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Component of fire resistant layers**

| 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 of the unit. A typical range is indicated.

### GLYCERIN

ID: 56-81-5

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-08**

%: **1.90 - 3.10** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Component of fire resistant layers**

| 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 of the unit. A typical range is indicated.

## TRIETHYLENE GLYCOL DI(2-ETHYLHEXOATE) (PRIMARY CASRN IS 94-28-0)

ID: 1330-87-6

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-08**

%: **0.11 - 2.24** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Component of the PVB safety glass interlayer material.**

| 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 of the unit. A typical range is indicated.

## EDGE TAPE

ID: Not Registered

HAZARD SCREENING METHOD: **Pharos Chemical and Materials Library** HAZARD SCREENING DATE: **2019-10-08**

%: **0.07 - 0.12** GS: **Not Screened** RC: **None** NANO: **No** ROLE: **Edge tape to protect the fire resistant layer from humidity.**

| HAZARD TYPE | AGENCY AND LIST TITLES | WARNINGS |
|---|---|---|
| | Hazard Screening not performed | |

SUBSTANCE NOTES: Tape made from aluminium foil laminated with polyester film and acrylic adhesive.
The relative amount of the substance in the product depends on the size 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: **2019-10-08**

%: **0.05 - 5.97** GS: **LT-UNK** RC: **None** NANO: **No** ROLE: **Component of the PVB safety glass interlayer material.**

| 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 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: **2019-10-08**

%: **0.01 - 0.37** GS: **NoGS** RC: **None** NANO: **No** ROLE: **Component of the PVB safety glass interlayer material.**

| 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 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
APPLICABLE FACILITIES: All.
CERTIFICATE URL:

ISSUE DATE: 2019-10-08

EXPIRY DATE: 2021-10-08

CERTIFIER OR LAB: Self-certified

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.

# Section 6: References

## MANUFACTURER INFORMATION


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

CONTACT NAME: **Dr. S. J. Slade**
TITLE: **Principal Environmental Technologist**
PHONE: **0044169554673**
EMAIL: **simon.slade@nsg.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 (insuficient 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.*